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# CUMULATIVE TABLE OF CONTENTS

Vol. 6, Jan. 15–Dec. 31, 1952


| Category | Abstracts |
|---|---|
| | Each number below indicates the first of a group of entries, not a single entry. |
| GENERAL | 1, 489, 756, 1065, 1371, 1587, 2243, 2552, 2800, 3146, 3481, 3880, 4339, 4681, 5007, 5248, 5711, 6236, 6489 |
| Atomic Bombs and Warfare | 756, 1065, 1587, 3146, 3880, 4339, 6236, 6489 |
| Atomic Power | 489, 1066, 1589, 4681, 5007, 5711 |
| Research Programs | 1, 491, 1371, 2243, 2552, 2800, 4340, 5248, 5713 |
| BIOLOGY AND MEDICINE | 2, 494, 758, 1070, 1373, 1590, 1945, 2245, 2553, 2801, 3147, 3482, 3734, 3881, 4341, 4682, 5008, 5249, 5530, 5714, 5925, 6237, 6491 |
| Aerosols | 517, 3737, 4347, 6493 |
| Radiation Effects | 23, 505, 768, 1076, 1375, 1593, 1947, 2249, 2557, 2808, 3153, 3484, 3738, 3888, 4349, 4684, 5009, 5257, 5545, 5715, 5933, 6240, 6494 |
| Radiation Hazards and Protection | 45, 513, 779, 1092, 1384, 1608, 1958, 2268, 2823, 3181, 3500, 3741, 3911, 4372, 4709, 5021, 5277, 5553, 5721, 5948, 6269, 6510 |
| Radiation Sickness | 55, 520, 784, 1097, 1964, 2273, 3187, 3503, 3918, 5028, 6278, 6515 |
| Radiography | 59, 521, 785, 1098, 1971, 2574, 2825, 3188, 3504, 3922, 4377, 5029, 5282, 5957, 6280 |
| Radiotherapy | 62, 523, 786, 1102, 1614, 1972, 2274, 2575, 2826, 3189, 3505, 3742, 3925, 4378, 4712, 5030, 5284, 5554, 5722, 5959, 6281, 6517 |
| Toxicology Studies | 69, 526, 787, 1108, 1615, 1978, 2279, 2576, 2833, 3198, 3510, 3936, 4380, 4714, 5034, 5555, 5724, 5964, 6290, 6522 |
| Tracer Applications | 71, 529, 789, 1110, 1387, 1618, 1980, 2283, 2577, 2837, 3202, 3512, 3743, 3941, 4381, 4716, 5036, 5290, 5557, 5726, 5965, 6292, 6523 |
| Waste Disposal | 518 |
| CHEMISTRY | 76, 533, 800, 1118, 1390, 1624, 1988, 2294, 2584, 2855, 3211, 3513, 3744, 3956, 4389, 4724, 5042, 5297, 5560, 5729, 5978, 6298, 6526 |
| Aerosols | 2010, 2603 |
| Analytical Procedures | 101, 543, 812, 1134, 1399, 1648, 2011, 2308, 2604, 2872, 3229, 3520, 3751, 3965, 4411, 4730, 5050, 5307, 5570, 5734, 5986, 6304, 6538 |
| Atomic Weights and Periodic Systems | 114, 2020, 3239, 3972, 4737 |
| Crystallography and Crystal Structure | 115, 550, 826, 1152, 1409, 1659, 2021, 2314, 2613, 2876, 3525, 3973, 4738, 5056, 5322, 5572, 5744, 5996, 6311, 6549 |

| Category | Abstracts |
|---|---|
| **CHEMISTRY** | |
| Deuterium and Deuterium Compounds | 122, 551, 828, 2023, 2317, 2614, 2877, 3241, 3529, 3977, 4416, 4739, 5057, 5325, 5997, 6316, 6551 |
| Fluorine and Fluorine Compounds | 123, 552, 829, 1157, 1411, 1662, 2026, 2320, 2616, 2878, 3244, 3530, 3983, 4420, 4744, 5060, 5327, 5575, 5746, 6000, 6318, 6553 |
| Graphite | 1161, 1414, 1669, 2036, 2324, 3246, 3995, 4430, 4745, 5334, 5576, 6006, 6321 |
| Laboratories and Equipment | 135, 830, 1163, 1416, 1670, 2037, 2326, 2619, 3760, 3998, 4433, 5062, 5335, 5578, 5750, 6323, 6561 |
| Molecular Structure | 136, 1165, 1417, 1671, 2882, 3999, 4434, 4746, 5065, 5341, 6007, 6564 |
| Radiation Chemistry | 139, 831, 1167, 1674, 2327, 2620, 2883, 3248, 3531, 3761, 4000, 5342, 5580, 5752, 6325, 6565 |
| Radiation Effects | 140, 556, 834, 1168, 1419, 1676, 2042, 2329, 2624, 2885, 3535, 3762, 4004, 4437, 4748, 5066, 5344, 5581, 5754, 6008, 6326, 6568 |
| Rare Earths and Rare-earth Compounds | 147, 558, 839, 1171, 1682, 2333, 2632, 2889, 3251, 3536, 3763, 4009, 4438, 5348, 5582, 5755, 6010, 6330, 6570 |
| Separation Procedures | 148, 843, 1172, 1422, 1685, 2047, 2340, 2633, 2890, 3253, 3540, 3765, 4014, 4439, 4751, 5068, 5757, 6012, 6333, 6574 |
| Sorption Phenomena | 154, 1425, 2893, 3546, 4019, 5349, 5759, 6336 |
| Spectroscopy | 155, 849, 1427, 1694, 2051, 2345, 2637, 2895, 3257, 3547, 3768, 4021, 4444, 4754, 5074, 5350, 5760, 6338, 6577 |
| Syntheses | 162, 565, 851, 1176, 1429, 1697, 2052, 2348, 2639, 2899, 3260, 4022, 4447, 4758, 5075, 5353, 5585, 5761, 6013, 6339, 6578 |
| Tracer Applications | 176, 572, 854, 1182, 1432, 2057, 2350, 2642, 3548, 3769, 4031, 4470, 5084, 5355, 5763, 6343 |
| Transuranic Elements and Compounds | 2058, 2351, 2902, 3261, 4034, 4474, 4762, 5587, 5764 |
| Tritium and Tritium Compounds | 2352, 2904, 4038 |
| Uranium and Uranium Compounds | 180, 573, 855, 1183, 1433, 2060, 2354, 2644, 2905, 3264, 3550, 3771, 4039, 4763, 5085, 5358, 5589, 5765, 6017, 6345 |
| Waste Disposal | 858, 1184, 1436, 2355, 2906, 4764, 6018 |
| **ENGINEERING** | 181, 575, 859, 1185, 1437, 1705, 2064, 2356, 2645, 2907, 3265, 3555, 3774, 4041, 4476, 4766, 5088, 5359, 5590, 5767, 6019, 6346, 6585 |
| Aerosols | 862, 1439, 1708, 2908, 3266, 3555, 3774, 4043, 6022 |
| Heat Transfer and Fluid Flow | 184, 577, 863, 1196, 1440, 1709, 2066, 2359, 2648, 2909, 3267, 3556, 3775, 4044, 4479, 4766, 5088, 5359, 5590, 5767, 6024, 6347, 6585 |
| Materials Testing | 191, 876, 1206, 1721, 2913, 4053, 4488, 4771, 5363, 6034, 6350 |
| Pumps | 194, 877, 2653, 3276, 3778, 5364, 5770 |
| Radiography | 2366, 3277, 4772 |
| Tracer Applications | 195, 4054, 5092 |
| Vacuum Systems | 196, 582, 878, 1208, 1725, 2367, 2916, 3278, 3565, 3779, 4055, 4489, 4773, 5771, 6036, 6592 |
| Waste Disposal | 882, 1211, 2368, 4056, 5094, 6037 |

| Category | Abstracts |
|---|---|
| MINERALOGY, METALLURGY, AND CERAMICS | 199, 588, 884, 1214, 1445, 1726, 2073, 2370, 2655, 2918, 3280, 3566, 3780, 4057, 4491, 4774, 5095, 5367, 5596, 5775, 6038, 6351, 6595 |
| Ceramics and Refractories | 200, 884, 1214, 1447, 1726, 2074, 2655, 2918, 3280, 3566, 4774, 5096, 5369, 5596, 6351, 6595 |
| Corrosion | 210, 588, 888, 1217, 1450, 2076, 2371, 2657, 2920, 3281, 3567, 3780, 4057, 4492, 4776, 5100, 6038, 6354 |
| Geology and Mineralogy | 211, 589, 890, 1220, 1451, 1727, 2077, 2372, 2658, 2922, 3282, 3568, 3781, 4062, 4496, 4778, 5370, 5597, 5775, 6052, 6355, 6596 |
| Metals and Metallurgy | 223, 591, 893, 1226, 1462, 1729, 2079, 2373, 2662, 2924, 3286, 3572, 3783, 4067, 4504, 4780, 5104, 5374, 5601, 5781, 6057, 6362, 6601 |
| Tracer Applications | 251, 1744, 2101, 3293, 3797, 4519, 5613 |
| PHYSICS | 252, 608, 915, 1260, 1481, 1745, 2102, 2385, 2672, 2943, 3295, 3580, 3798, 4082, 4520, 4800, 5114, 5395, 5614, 5788, 6078, 6371, 6617 |
| Aerosols | 609, 3304, 3800, 4091, 4528, 4810, 5403, 5797 |
| Astrophysics | 256, 922, 1754, 2389, 2953, 3308, 3591, 5125, 6080 |
| Cosmic Radiation | 257, 610, 923, 1265, 1488, 1756, 2110, 2390, 2683, 2954, 3311, 3592, 4093, 4529, 4813, 5126, 5404, 5624, 5798, 6081, 6380, 6629 |
| Crystallography and Crystal Structure | 617, 1271, 2117, 2410, 2689, 3324, 3603, 4102, 4540, 5413, 5807, 6091, 6388, 6639 |
| Electrical Discharge | 271, 620, 931, 1274, 1768, 2120, 2690, 2968, 4104, 4543, 4843, 5414, 5808, 6092, 6390 |
| Electrons | 621, 933, 1490, 1769, 2122, 2412, 2969, 3327, 3606, 3801, 4109, 4547, 4844, 5133, 5632, 5810, 6098, 6393, 6642 |
| Gases | 272, 622, 934, 1275, 1491, 1773, 2123, 2413, 2691, 2970, 3329, 3609, 3802, 4111, 4551, 4847, 5415, 6102, 6394, 6646 |
| Instruments | 276, 625, 935, 1278, 1492, 1777, 2125, 2414, 2693, 2971, 3330, 3613, 3804, 4119, 4556, 4849, 5134, 5416, 5633, 5813, 6104, 6396, 6647 |
| Isotopes | 284, 1790, 2418, 2698, 2985, 3344, 3617, 3811, 4131, 4563, 4859, 5142, 5422, 5637, 5819, 6108, 6400 |
| Isotope Separation | 286, 946, 1282, 1791, 2129, 2419, 2699, 2988, 3814, 4565, 4861, 5144, 5423, 5638, 5821, 6110, 6401 |
| Mass Spectrography | 288, 636, 947, 1283, 1792, 2131, 2420, 2701, 2989, 3346, 3619, 4132, 4566, 4862, 5145, 5424, 5824, 6113, 6402, 6654 |
| Mathematics | 292, 637, 948, 1285, 1502, 1796, 2424, 2705, 2992, 3348, 3622, 3816, 4138, 4568, 5146, 5425, 5826, 6115, 6403, 6658 |
| Measuring Instruments and Techniques | 293, 638, 954, 1286, 1503, 1797, 2133, 2427, 2707, 2995, 3353, 3626, 3817, 4143, 4576, 4866, 5147, 5426, 5639, 5827, 6116, 6407, 6660 |
| Mesons | 315, 669, 973, 1297, 1513, 1816, 2161, 2448, 2721, 3014, 3367, 3648, 3825, 4163, 4591, 4895, 5168, 5452, 5649, 5846, 6132, 6426, 6670 |
| Meteorology | 331, 675, 979, 1516, 3041, 3378, 3827, 4912, 5656, 5853, 6431, 6673 |
| Microwaves | 2731, 3379, 4611, 5854 |
| Molecular Properties | 1302, 1521, 1828, 2166, 2734, 3042, 3382, 3658, 4179, 4913, 5175, 5855, 6144, 6674 |

| Category | Abstracts |
|---|---|
| **PHYSICS** | |
| Neutrons | 332, 678, 980, 1829, 2737, 3044, 3384, 3660, 3830, 4180, 4612, 4915, 5177, 5856, 6432 |
| Nuclear Physics | 333, 679, 981, 1304, 1522, 1833, 2167, 2460, 2738, 3046, 3386, 3665, 3831, 4186, 4618, 4918, 5179, 5456, 5657, 5857, 6145, 6435, 6675 |
| Nuclear Properties | 334, 686, 984, 1307, 1525, 1838, 2168, 2464, 2744, 3052, 3390, 3671, 3834, 4193, 4619, 4924, 5183, 5459, 5660, 5863, 6149, 6439, 6678 |
| Nuclear Reactors | 353, 694, 998, 1315, 1527, 1852, 2178, 2481, 3070, 3403, 3682, 3844, 4218, 4938, 5196, 5468, 5669, 5871, 6452, 6685 |
| Nuclear Transformation | 357, 698, 1003, 1326, 1528, 1856, 2181, 2483, 2751, 3072, 3405, 3684, 3845, 4222, 4632, 4941, 5199, 5470, 5670, 5875, 6159, 6453, 6686 |
| Particle Accelerators | 377, 713, 1024, 1335, 1541, 1882, 2197, 2498, 2759, 3086, 3411, 3692, 3854, 4230, 4637, 4959, 5204, 5481, 5683, 5887, 6176, 6461, 6688 |
| Radiation Absorption and Scattering | 381, 715, 1027, 1339, 1543, 1887, 2198, 2503, 2761, 3089, 3417, 3701, 3856, 4233, 4640, 4964, 5212, 5486, 5685, 5894, 6179, 6465, 6692 |
| Radiation Effects | 403, 730, 1044, 1349, 1552, 2214, 2520, 2770, 3104, 3433, 3706, 3865, 4246, 4654, 4978, 5225, 5503, 5694, 5908, 6186, 6474, 6705 |
| Radioactivity | 405, 731, 1046, 1351, 1553, 1906, 2216, 2522, 2775, 3105, 3434, 3711, 3866, 4247, 4656, 4982, 5228, 5507, 5695, 5911, 6188, 6477, 6709 |
| Rare Earths and Rare-earth Compounds | 1359, 1927, 4993, 6720 |
| Shielding | 441, 1360, 2793, 3126, 3445, 3725, 3874, 4279 |
| Spectroscopy | 443, 743, 1928, 2230, 2540, 2794, 3127, 3447, 3726, 3875, 4280, 4672, 4994, 5238, 5921, 6203, 6721 |
| Theoretical Physics | 452, 744, 1054, 1361, 1561, 1931, 2231, 2543, 2795, 3136, 3450, 3728, 3877, 4283, 4675, 4995, 5240, 5523, 5708, 5922, 6205, 6485, 6723 |
| Tracer Applications | 755, 5006, 5529 |
| Tritium and Tritium Compounds | 5710 |
| Uranium and Uranium Compounds | 1943, 2242, 2799, 4297, 5247, 6725 |
| **PATENTS** | 459, 1564, 1944, 3457, 4299, 6210 |
| Chemistry | 459, 1564, 3457, 4299, 6210 |
| Engineering | 1571, 3465, 6215 |
| Mineralogy, Metallurgy, and Ceramics | 471, 1944, 3466, 4308 |
| Physics | 473, 1572, 3467, 4310, 6219 |

| | Page |
|---|---|
| BINDING INSTRUCTIONS | v |
| ERRATA | v |
| AUTHOR INDEX | 821 |
| SUBJECT INDEX | 877 |
| NUMERICAL INDEX OF AEC REPORTS | 1015 |
| NNES ANNOUNCEMENT | 1113 |

# BINDING INSTRUCTIONS

This issue of Nuclear Science Abstracts contains Title Pages, Binding Instructions, a Cumulative Table of Contents, an Author Index, and a Subject Index for Volume 6 and a Numerical Index of Reports listing the availability of reports abstracted in all six volumes of Nuclear Science Abstracts and in the two volumes of its predecessor, Abstracts of Declassified Documents. In addition, there are lists of the Depository Libraries and published NNES volumes. The pagination of the cumulative indexes and of the lists is a continuation of the pagination of Volume 6.

In binding Volume 6, the Tables of Contents, Reports Reference Lists (numbered with Roman numerals), and the indexes (denoted as Index-1, etc.) which accompanied each number of Volume 6 should be discarded for they are superseded by the cumulations contained in this issue.

Three title pages have been provided so that the volume can be bound in one cover or in two covers for greater convenience in handling.

# CUMULATIVE ERRATA

NSA, Vol. 5, No. 15, p.631. In the last sentence in abstract 3973, "The experiment on using In research transmission for the analytical determination of In in Sn is completed;" should read: "The experiment on using In neutron absorption resonances for the determination of In in Sn is completed;".

NSA, Vol. 5, No. 18, p.756. In abstract 4851, $Co^{50}$ in the second reaction should be $Co^{59}$.

NSA, Vol. 5, No. 19, p.vi. The data and abstract numbers of AECU-1433 and AECU-1452 should be interchanged.

NSA, Vol. 5, No. 19, p.799. In abstract 5141, AECU-1433 should be AECU-1452.

NSA, Vol. 5, No. 20, p.882. The report number of abstract 5744 has been changed from (NP-3314) to (AECU-1939).

NSA, Vol. 5, No. 22, p.1018. In abstract 6903, last line, the word "effects" should precede the comma.

NSA, Vol. 5, No. 24. In Author Index, for

Anderson, R. D., 5-5042 should be 5-5141.
Burton, Milton, 5-5042 should be 5-5141.
Davison, S., 5-5042 should be 5-5141.
Lindner, Manfred, 5-8324 should be 5-7324.
Long, Arthur O., 5-5141 should be 5-5042.
Willard, John E., 5-5141 should be 5-5042.

NSA, Vol. 5, No. 24. In Subject Index, for

Hydrogen molecules, 5: 5042 should be 5: 5141.
Methyl radicals, 5: 5042 should be 5: 5141.
Reaction mechanisms (organic), 5: 5042 should be 5: 5141.
Cesium ions, 5: 5141 should be 5: 5042.
Glass, 5: 5141 should be 5: 5042.
Iron(III) ions, 5: 5141 should be 5: 5042.
Sodium ions, 5: 5141 should be 5: 5042.

NSA, Vol. 5, No. 24. Errors found in the Numerical Index of AEC Reports are not listed here inasmuch as it is superseded by the new Index in this issue.

NSA, Vol. 6, No. 1, p.32. In abstract 248, Zr in the third line should be Zn.

NSA, Vol. 6, No. 1, p.56. In abstract 446, $In^{192}$ in the third line should be $Ir^{192}$.

NSA, Vol. 6, No. 1, p.59. In abstract 469, J. DeMont should be J. De Ment.

NSA, Vol. 6, No. 2, p.vi. In the Reports Reference List, the title of NEPA-1701 should refer to NaI-Tll crystals.

NSA, Vol. 6, No. 2, p.61. In abstract 496, the third sentence should read: "Radioautographs made of the livers of rats administered $C^{14}$-labeled stilbamidine tend to confirm histochemical evidence that stilbamidine is retained in the mitochondria of the liver cells."

NSA, Vol. 6, No. 2, p.66. In abstract 526, third line of the text, $Ca^{245}$ should be $Ca^{45}$.

NSA, Vol. 6, No. 2, p.67. In abstract 530, (Entire report) should appear at the end.

NSA, Vol. 6, No. 2, p.73. In abstract 570, C-Curarube should be C-Curarine.

NSA, Vol. 6, No. 3, p.v. In title of NYO-3031, INTEGRATION should be INTERACTION.

NSA, Vol. 6, No. 3, p.116. In abstract 925, INTEGRATION in the title should be INTERACTION.

NSA, Vol. 6, No. 6A, page i. In Table of Contents, the word Aerosols, immediately below CHEMISTRY, and the associated number 1624 should be deleted.

NSA, Vol. 6, No. 6A, page 208. The word AEROSOLS immediately above abstract 1624 should be deleted.

NSA, Vol. 6, No. 6A, p.210. In abstract 1639, in the title, XVI should be changed to XV(A). Make same correction p.iv, in report NYO-849.

NSA, Vol. 6, No. 6B, p.5. Author DEMONT, J. should be DE MENT, J.

NSA, Vol. 6, No. 6B, p.12 of Supplement. The isotope $_{57}La^{138}_{81}$ should appear in the first column, top line.

NSA, Vol. 6, No. 7, p.261. In abstract 2057, change Roman numeral IV in title to XV.

NSA, Vol. 6, No. 8, p.v. In BNL-1109, the senior author should be Herbert J. Kouts.

NSA, Vol. 6, No. 8, p.299. Abstract 2356 should have COO-90 added as cross reference to AECU-1889. Add same reference to report AECU-1889, p.iii.

NSA, Vol. 6, No. 8, p.304. In abstract 2390, the senior author should be Herbert J. Kouts.

NSA, Vol. 6, No. 8, p.314. In abstract 2476, the value $-2.32 \pm 0.07$ mc in the fourth line should be $-1.32 \pm 0.07$ Mc.

NSA, Vol. 6, No. 9, p.348. In abstract 2727, author B. T. Feild should be B. T. Feld.

NSA, Vol. 6, No. 9, p.350. In abstract 2748, the authors are Harold Walchli, Ralph Livingston, and William J. Martin rather than B. C. Frazer and R. Pepinsky as printed.

NSA, Vol. 6, No. 10, p.vi. In AERE I/M-16 $Ti^{204}$ and $Ti^{203}$ in the title should be $Tl^{204}$ and $Tl^{203}$.

NSA, Vol. 6, No. 10, p.367. $Ti^{204}$ and $Ti^{203}$ in the title and in line 3 of abstract 2890 should be $Tl^{204}$ and $Tl^{203}$.

NSA, Vol. 6, No. 10, p.368. In abstract 2894, NSA 5-5141 should be NSA 5-5042.

NSA, Vol. 6, No. 10, p.393. In abstract 3114, the value $2.03^2$ mc should be 2.03 $mc^2$.

NSA, Vol. 6, No. 10, index p.6. In the Numerical Index of Reports, NYO-1514 should be NYO-3045; its abstract number 5-659 should read 6-1514.

NSA, Vol. 6, No. 11, p.v. CF-51-11-113, Lecture I should be CF-51-5-113, Lecture I.

NSA, Vol. 6, No. 11, p.425. At the end of the title listing, abstract 3404, the report number should be CF-51-11-113, Lecture I.

NSA, Vol. 6, No. 14, p.vii. In NP-3799, the senior author should be G. L. Clark.

NSA, Vol. 6, No. 14, p.494. In abstract 4004, the senior author should be G. L. Clark.

NSA, Vol. 6, No. 15, p.v. In title of NYO-3582, SMALL SMALL-RING should read SOME SMALL-RING.

NSA, Vol. 6, No. 15, p.534. In abstract 4366, "Sup. 1," should be inserted in the journal reference following the comma.

NSA, Vol. 6, No. 15, p.543. In title of abstract, SMALL SMALL-RING should read SOME SMALL-RING.

NSA, Vol. 6, No. 15, Supplement p.1. For $_{12}Mg^{24}_{12}$ the proton energy should be $E_p$, not $E_t$.

NSA, Vol. 6, No. 16, p.vi. In title of NYO-3216 xi should be zeta.

NSA, Vol. 6, No. 16, p.599. In abstract 4896, the Greek character xi should be changed to zeta in the title and in the first and eleventh lines.

NSA, Vol. 6, No. 17, p.619. In the title of abstract 5066, NUCLEAR REACTIONS should read NUCLEAR REACTORS.

NSA, Vol. 6, No. 17, p.625. In abstract 5117, the word radium should be replaced by sodium each time it appears in the text (lines 1,4,7, and 8).

NSA, Vol. 6, No. 17. On p.5 of Index, the abstract number for UCRL-1783 should be 6-4248, not 6-4218.

NSA, Vol. 6, No. 18A, p.642. In abstract 5257, third line of abstract 6-1395 should be changed to 6-1375

NSA, Vol. 6, No. 22. In abstract 6295, p.770, reference Record Med. Gen. Practice Clinics should be changed to Intern. Record of Med.

# CUMULATIVE AUTHOR INDEX

**For each reference the digit preceding the dash is the volume number and digits after the dash are the abstract number.**


AAMODT L C
6-5341
AARON DAVID
6-1173
ABAKYAN S V
6-6365
ABBATT JOHN D
6-3505
ABBOTT T A
6- 485
ABRAGAM A
6-1300 6-1847
ABRAHAM B M
6-2108
ABRAHAM S
6-2578
ABRAHAMSEN NORMAN S B
6-5559
ABRAMSON A E
6-6033
ABRIBAT MARCEL
6-3443 6-5707
ABSON W
6-2437
ACCARY A
6-1156
ACCOUNTIUS OLIVER E
6- 208
ACHERMAN WALTER L
6-1263 6-2920 6-2921
6-4777 6-6048 6-6049
ACHTER M R
6-2022
ACKERLIND C G
6- 596
ACKERMANN ISABELLE B
6-3173 6-5019
ACOUSTIC RESEARCH LAB
HARVARD UNIV
6-4041
ACQUISTA NICOLO
6-2898
ADAIR ROBERT K
6-2471 6-3390 6-5461
ADAMS GEORGE B JR
6-2589 6-2591
ADAMS KENNETH B
6-2541
ADAMS M
6-5011
ADAMS N
6-2116
ADAMS P T
6-4760
ADAMS RAYMOND V
6-5806
ADAMS THOMAS J
6-1635
ADAMSON ARTHUR W
6- 87 6- 139 6-1123
6-3220
ADDOMS J N
6-4481
ADER MARIE
6-1292 6-2785 6-4150
ADLAM J H
6-1493
ADLER F L
6-6240
ADLER I
6-2693
ADMIRALTY CENTER FOR
SCIENTIFIC INFORMATION
AND LIAISON LONDON
ENGLAND
6-2693
AEBERSOLD PAUL C
6-3948
AEC NEUTRON CROSS
SECTION ADVISORY GROUP
6-5177
AEPPLI H
6- 347 6- 417 6-5463
6-5699
AERONAUTICAL RESEARCH
CONSULTATIVE COMMITTEE
AUSTRALIA
6-1624
AERONAUTICAL RESEARCH
COUNCIL GREAT BRITAIN
6-6350
AGAFOSHIN N P
6-3239
AGENO MARIO
6-4655 6-4749 6-4979
6-5226 6-5227 6-5505
6-5506
AGNEW HAROLD M
6-2751 6-3390 6-3676
AHEARN A J
6- 967
AHMANN DONALD H
6-2336
AHMED A A
6-1049
AHOKAS A
6-4349 6-4350
AHRENS L H
6-5373
AHRENS T
6-3438 6-6199
AHRLAND STEN
6-1434
AIKAWA JERRY K
6-3945
AIKEN ELAINE G
6-6555
AIKEN W R
6-3468
AILLOUD J
6-3426
AIR CLEANING LAB
HARVARD UNIV SCHOOL
OF PUBLIC HEALTH
6-6562 6-6563
AIR FORCE RADIATION LAB
UNIV OF CHICAGO
6-2557 6-4352 6-5550
6-6244
AIR UNIV SCHOOL OF
AVIATION MEDICINE
6-2558 6-2568 6-5551
AIRCRAFT NUCLEAR
PROPULSION PROJECT
6-5091
AIRD A D
6-5908
AIREY L
6-2872 6-3522
AITKEN K L
6-5828 6-6164
AITKEN P B
6- 423
AIZU K
6-4600
AJZENBERG FAY
6- 536 6-5473
AKELEY EDWARD
6-5485
AKIMOV G V
6-2076
AKSIEZER A I
6-3589
AKTIEBOLAGET ATOMENERGI
SWEDEN
6-4642
ALABAMA POLYTECHNIC INST
6-3346
ALABAMA UNIV
6-6595
ALABAMA UNIV ENGINEERING
EXPERIMENT STATION
6-2105
ALADEV I T
6-3274
ALBANSKII V L
6- 114
ALBAUM HARRY
6-2841
ALBERIGI A
6-4856
ALBERS-SCHONBERG H
6- 347 6-5463
ALBERT A
6-3950
ALBERT G E
6-4140 6-4141 6-4142
ALBERT PHILIPPE
6- 549 6-6370
ALBERT RICHARD D
6-2708
ALBERTONI S
6-5000
ALBOUY GEORGETTE
6-2786 6-4991
ALBRIGHT CHARLES H
6- 538
ALBRIGHT EDWIN C
6-3971
ALBURGER DAVID E
6-1530 6-3107 6-3434
6-5229 6-6119 6-6120
6-6149
ALDER KURT
6- 346 6-4287
ALDER MARILYN GRACE
6-5347
ALDERMAN I M
6-5019 6-6251
ALDRICH F L
6-4850
ALEKSEEVA K I
6-3319
ALEXANDER B H
6- 603 6-1474 6-2106
6-2933
ALEXANDER GEORGE V
6- 69 6- 70 6- 158
ALFIN-SLATER ROSLYN B
6-6344
ALFRED UNIV
6- 199 6-4560
ALIKHANOV A I
6-4530
ALIKHANYAN A
6-2113 6-3318 6-6672
ALLARD GERARD A
6-1342 6-1572 6-1908
ALLARD GILBERT
6-4127
ALLEGRETTI L
6-4833 6-6086
ALLEN A J
6-3045 6-4934 6-4970
ALLEN AUGUSTINE O
6-1678 6-2329 6-6707
ALLEN BENNET M
6- 36
ALLEN G
6-2761 6-2773
ALLEN GLENN L
6-3737
ALLEN HARRY C JR
6-5351
ALLEN HERBERT C JR
6-5723
ALLEN INKA
6-4400
ALLEN J F
6-5617
ALLEN J GARROTT
6-6516
ALLEN JAMES S
6-1909 6-4273 6-6663
ALLEN K W
6-1886 6-2186 6-4229
ALLEN N L
6-4821 6-6093 6-6107
ALLEN R A
6-3664 6-4876
ALLEN ROBERT C
6-1878
ALLEN S
6- 618 6-1470 6-4795
6-5366 6-6612
ALLIS W P
6-1768 6-5414
ALLIS-CHALMERS
MANUFACTURING CO
6-4853
ALLISON E B
6-3582

ALLRED J C
6-2182 6-3856 6-5212
6-5213
ALLRED V DEAN
6-1426
ALMQVIST E
6-1886 6-2186 6-4229
ALPEN E L
6-4345 6-4349 6-4350
ALPERT D
6-2950
ALPERT MORRIS
6-2029
ALPHER RALPH A
6-1755
ALT H L
6-2568
ALTER H W
6-1130
ALTLAND PAUL D
6-1090
ALTMAN KURT I
6-4722 6-5295
ALTSHUL A D
6-6028
ALTSHULER SAUL
6-6175
ALVAREZ L W
6-1818
ALY SAMIRA M
6-5270
AMALDI E
6-1818 6-5129 6-5412
AMBLE E
6-2051
AMBROSEN J
6-3389
AMERICAN ELECTRO METAL CORP
6-2300
AMERIO ALESSANDRO
6-2396
AMES LAB
6- 86 6- 157 6- 256
6- 275 6- 276 6- 539
6- 558 6- 559 6- 560
6- 561 6- 562 6- 563
6- 573 6- 735 6- 839
6- 840 6-1028 6-1119
6-1171 6-1226 6-1464
6-1504 6-1531 6-1532
6-1629 6-1653 6-1858
6-1988 6-1992 6-2012
6-2167 6-2181 6-2301
6-2308 6-2464 6-2595
6-2680 6-3073 6-3109
6-3290 6-3514 6-3516
6-3546 6-3753 6-3763
6-3804 6-4010 6-4392
6-4393 6-4394 6-4395
6-4660 6-4803 6-4804
6-4983 6-5042 6-5074
6-5135 6-5367 6-5380
6-5396 6-5738 6-5758
6-5760 6-5829 6-5991
6-6007 6-6014 6-6059
6-6374
AMHERST COLL
6-1425
AMIRIKIAN ARSHAM
6-2907
AMIS EDWARD S
6-2311
AMPHLETT C B
6-5589
AMUNDSON NEAL R
6-4486
ANDEM M R
6-1600
ANDEREGG JOHN A
6-4393
ANDERSEN A G H
6-5363
ANDERSON C E
6-6151 6-6190
ANDERSON E A
6-6550
ANDERSON E G
6- 774
ANDERSON E H
6-5025
ANDERSON EDWARD E JR
6-5533
ANDERSON G W
6-1266
ANDERSON H C
6-1570 6-6210
ANDERSON HERBERT L
6-1818 6-2730 6-3019
6-3020 6-3021 6-4216
6-4230 6-4606 6-4607
ANDERSON JOHN
6-2827
ANDERSON L C
6- 916 6-2356
ANDERSON MARGARET E
6- 852
ANDERSON NORMAN G
6-2245
ANDERSON O
6-4960
ANDERSON R A
6- 231
ANDERSON R CHRISTIAN
6- 104 6-5300 6-5355
6-6298
ANDERSON ROBBIN C
6-2611
ANDERSON WENDELL L
6- 517
ANDRADE E N DA C
6-2006 6-3792
ANDREWS G A
6-6250
ANDRONIKASHVILI E L
6-6379
ANDRUSSOW LEONID
6-4117 6-4118
ANGELL C E
6-4895
ANGER H O
6- 521 6-1813 6-2574
6-3194
ANIANSSON G
6- 176
ANISHCHENKO YU V
6-5801
ANKER R M
6-4455
ANNIS MARTIN
6-3599 6-5851
ANTHONY D S
6- 532
APELQOT S
6-5082
APKARIAN HARRY
6-2645 6-2646
APPELMANS M
6-6518
APPLIED FISHERIES LAB UNIV OF WASH
6-3159 6-5933 6-5934
APRISON M H
6-3922
APTE A S
6-3036
AQVIST STIG E G
6-2050
ARAI TADASHI
6-3242
ARAKI GENTARO
6- 748 6-3137
ARAMBOURG CAMILLE
6-1461
ARCAND G M
6-1682
ARCE R
6- 923 6-4854 6-5816
ARCHER JAMES E
6-6203
ARCHER R H
6-3197
ARCHER VINCENT W
6-1961
ARCOS CORP
6-4068 6-6066
ARDRAN G M
6-5021
ARFKEN G B
6- 339 6-1844 6-4217
ARGO H V
6-3390 6-3676
ARGONNE NATIONAL LAB
6- 28 6- 77 6- 78
6- 125 6- 163 6- 164
6- 225 6- 381 6- 405
6- 500 6- 501 6- 502
6- 506 6- 520 6- 526
6- 556 6- 568 6- 625
6- 640 6- 679 6- 698
6- 763 6- 784 6- 863
6- 958 6-1046 6-1047
6-1048 6-1082 6-1083
6-1084 6-1135 6-1176
6-1260 6-1286 6-1287
6-1387 6-1414 6-1415
6-1422 6-1427 6-1428
6-1506 6-1527 6-1608
6-1609 6-1615 6-1616
6-1677 6-1694 6-1798
6-1829 6-1838 6-1906
6-1907 6-2102 6-2320
6-2324 6-2346 6-2411
6-2420 6-2430 6-2431
6-2432 6-2433 6-2434
6-2466 6-2555 6-2562
6-2563 6-2564 6-2565
6-2566 6-2567 6-2576
6-2632 6-2644 6-2689
6-2712 6-2902 6-2974
6-3042 6-3202 6-3215
6-3216 6-3250 6-3257
6-3267 6-3280 6-3332
6-3348 6-3391 6-3413
6-3418 6-3486 6-3487
6-3513 6-3525 6-3559
6-3591 6-3630 6-3671
6-3711 6-3726 6-3738
6-3761 6-3772 6-3811
6-3882 6-3936 6-3958
6-4034 6-4035 6-4036
6-4037 6-4123 6-4133
6-4180 6-4197 6-4218
6-4219 6-4220 6-4250
6-4252 6-4439 6-4448
6-4476 6-4559 6-4573
6-4632 6-4672 6-4687
6-4688 6-4689 6-4690
6-4691 6-4692 6-4693
6-4714 6-4725 6-4726
6-4730 6-4731 6-4732
6-4776 6-4849 6-4862
6-4866 6-4938 6-4941
6-4981 6-4982 6-5037
6-5184 6-5348 6-5364
6-5365 6-5472 6-5534
6-5553 6-5555 6-5556
6-5562 6-5563 6-5570
6-5578 6-5581 6-5633
6-5639 6-5696 6-5697
6-5714 6-5734 6-5819
6-5863 6-5978 6-6017
6-6104 6-6117 6-6188
6-6241 6-6290 6-6402
6-6407 6-6408 6-6409
6-6410 6-6439 6-6474
6-6478 6-6527 6-6565
6-6570 6-6585 6-6647
6-6654 6-6660 6-6678
6-6709 6-6710 6-6721
ARIZONA UNIV
6-6054
ARKANSAS UNIV
6-1134 6-2311
ARKHAROV V I
6-4799
ARLEY NIELS
6-3161
ARMENTEROS R
6- 264 6-4539
ARMISTEAD F C
6-6230
ARMOUR RESEARCH FOUNDATION
6- 591 6- 604 6- 903
6-1498 6-2926 6-3291
6-3419 6-4505 6-4785
6-4786 6-4788 6-4792
6-5379 6-5383 6-5384
6-5606 6-6034
ARMSTRONG A H
6-3856 6-5212
ARMSTRONG D B
6-2126
ARMSTRONG JOHN R
6-3353
ARMY MEDICAL RESEARCH LAB FORT KNOX
6- 31 6- 62 6-1075
6-2561 6-2605 6-2624
6-3181 6-5948
ARNER W J
6-1419
ARNETTE T
6-3844 6-5669
ARNOLD J T
6-1671
ARNOLD JAMES S
6-4388
ARNOLD W A
6- 484
ARNOLD W R
6- 955
ARNOUS E
6-6485
ARNSTEIN H R V
6- 571 6-4030
ARONOFF S
6- 159 6-1704 6-5535
6-5966
ARONS I
6-3502
ARONSON ANNA
6-3523
ARROL W J
6- 151 6-2635 6-2890
6-5143
ARTHUR J S
6-4934 6-4970
ARTOM CAMILLO
6- 799 6-1081 6-4027
ARZELIES HENRI
6-6393
ASARO FRANK
6- 415 6-1481 6-2775
6-3108 6-4193 6-5228
ASCHOFF W A
6-3578
ASCOLI R
6-4857 6-5126 6-5137
6-6700

ASHKIN J
6-2798 6-3099
ASWATHANARAYANA U
6-6358
ATAKA V
6-4605
ATEN A H W JR
6-2887 6-4032 6-4260
6-5235 6-6481
ATEN J B TH
6-4032
ATHERTON J E JR
6-1745
ATKINS DON C JR
6-5047
ATKINSON B
6-5575
ATKINSON D E
6- 164
ATKINSON J R
6- 401
ATKINSON RUSSELL H
6-2608
ATKINSON WILLIAM R
6-6092
ATOMIC ENERGY COMMISSION
6-1187 6-1318 6-2552
6-4556 6-4557
ATOMIC ENERGY MEDICAL
RESEARCH PROJECT
WESTERN RESERVE UNIV
6-6293 6-6524
ATOMIC ENERGY PROJECT
CANADA
6-1494 6-1495 6-1508
6-1554 6-1802 6-1831
6-1854 6-1857 6-2503
6-2971 6-2975 6-2977
6-5790 6-5857 6-5858
6-6596
ATOMIC ENERGY PROJECT
UNIV OF CALIF
LOS ANGELES
6- 12 6- 13 6- 35
6- 36 6- 37 6- 69
6- 70 6- 158 6- 508
6- 765 6-1343 6-1380
6-1500 6-1600 6-1702
6-2042 6-2048 6-2269
6-2711 6-2805 6-3003
6-3158 6-3344 6-3628
6-3734 6-3890 6-3965
6-4344 6-4682 6-5252
6-5253 6-5254 6-5277
6-5418 6-5419 6-5509
6-5539 6-5540 6-5552
6-5634 6-5887 6-5909
6-5931 6-5971 6-6492
6-6650
ATOMIC ENERGY PROJECT
UNIV OF ROCHESTER
6- 509 6- 510 6- 516
6- 528 6- 657 6-2279
6-2559 6-2560 6-2823
6-2833 6-3149 6-3187
6-3205 6-3489 6-3518
6-3774 6-4355 6-4380
6-4695 6-4696 6-4697
6-4698 6-4699 6-4700
6-4701 6-4713 6-4715
6-4721 6-4722 6-5011
6-5267 6-5541 6-5542
6-5543
ATOMIC ENERGY PROJECT
WESTERN RESERVE UNIV
6-1379 6-2579 6-3743
6-3868 6-4357 6-4694
ATOMIC ENERGY RESEARCH
ESTABLISHMENT HARWELL
BERKS ENGLAND
6- 135 6- 151 6- 155
6- 156 6- 181 6- 226
6- 271 6- 332 6- 358
6- 514 6- 544 6- 545
6- 639 6- 699 6- 849
6- 878 6- 956 6- 957
6-1003 6-1027 6-1185
6-1227 6-1228 6-1391
6-1423 6-1493 6-1505
6-1529 6-2047 6-2137
6-2138 6-2139 6-2309
6-2314 6-2367 6-2554
6-2587 6-2613 6-2635
6-2654 6-2709 6-2731
6-2732 6-2770 6-2859
6-2860 6-2872 6-2890
6-2914 6-2915 6-2925
6-3072 6-3246 6-3324
6-3522 6-3541 6-3582
6-3613 6-3685 6-3754
6-3755 6-3756 6-3771
6-3807 6-3808 6-3820
6-3821 6-3822 6-4580
6-4762 6-4925 6-4943
6-4959 6-5021 6-5050
6-5114 6-5115 6-5116
6-5134 6-5248 6-5335
6-5336 6-5426 6-5587
6-5613 6-5615 6-5698
6-5730 6-5736 6-5737
6-5814 6-5828 6-5894
6-5929 6-5986 6-6019
6-6057 6-6116 6-6186
6-6510 6-6561 6-6592
6-6670 6-6688 6-6723
ATTERLING HUGO
6-2760
ATTIX FRANK H
6-4578
ATWOOD K C
6-6499
AUDINOT M
6-5077
AUDUBERT RENE
6-3281
AUKERMAN LEE
6-6412
AUSTERN N
6-2190 6-2202 6-3372
AUSTING MARY E
6- 31
AVAKYAN S V
6-6071
AVERBACH B L
6- 595 6- 598 6- 618
6-1467 6-1470 6-2210
6-4794 6-4795 6-5107
6-5386 6-5782 6-6072
6-6389 6-6605 6-6611
6-6612
AVERY E C
6-1798 6-6439
AXEL P
6-1052 6-2783
AXELROD-HELLER DOROTHY
6-1389
AXON H J
6-6073
AYANT YVES
6- 341
AYERS AUGUSTUS SIDNEY
6-2012
AZAM
6- 880
AZEVEDO M DEODATA
6-3916
AZIMOV S A
6- 263 6-3376
AZIZ P M
6-6050

BABCOCK AND WILCOX CO
6-3229 6-3556 6-3557
6-4044 6-4492 6-4493
BABERO BERT B
6-4367
BABKO A K
6-3225
BACH J H
6-6725
BACHELET M
6-2905 6-5087
BACHMANN RUDOLF
6-3508
BACHOFER C S
6-4684 6-4685 6-4686
6-4850
BACKUS J G
6-4335
BACON A
6-2016
BACON G E
6- 721 6-1161 6-1162
6-3996 6-5056 6-6314
BACON J S D
6-5966
BACQ Z M
6- 51 6-1385
BADGLEY FRANKLIN J
6-3827
BAER W H
6- 596
BAERTSCHI PETER
6-3815
BAES C F JR
6-5735
BAEYERTZ M
6- 902 6-6034
BAGARYATSKII YU A
6- 244
BAGGE ERICH
6- 982 6-2239
BAGGETT L M
6-1009 6-2488
BAGNALL K W
6-6561
BAHNER CARL T
6-2866 6-2867 6-2868
BAHNISCH INGEBORG
6-5918
BAILEY CARL L
6-3692
BAILEY D L R
6-5594
BAILEY N H
6-2939
BAILEY R V
6- 185
BAINBRIDGE D W
6-1723 6-5602
BAINBRIDGE KENNETH T
6- 734
BAIR JOE KEAGY
6- 646 6- 647 6-1535
6-2756 6-3079 6-3084
6-3849
BAJWA G S
6-3600 6-5631
BAKER C J
6-3095
BAKER H DEAN
6- 627
BAKER HAYWARD R
6-1218
BAKER O H
6-4044 6-4493
BAKER R F
6-3292
BAKER T W
6-2314
BAKER W H
6- 645 6-4145
BAKER W K
6-5025
BAKER W R
6- 476 6- 486 6-1585
6-3476 6-4319
BAKER WILLIAM B
6- 647
BAKER WILLIAM D
6-3217
BAKISH R
6- 600 6-1238 6-3787
BAKKER C J
6- 420 6- 422 6-4737
BALDIN A M
6-4899
BALDINGER E
6- 314 6- 402 6-1018
6-1861 6-1895 6-2204
6-5490 6-6471
BALDWIN ROBERT
6- 163
BALDWIN W H
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BALDWIN W M JR
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6-4713
BALES P D
6- 183
BALFOUR J G
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6-3422 6-4618 6-6434
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6-3592
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6-5551
BALOG GEORGE
6-3520
BAME S J JR
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BANKS E
6-4012
BANKS ROBERT R
6-5383
BANNERMAN R C
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BANNING FLOYD H
6-1727
BARBEE KENDALL W
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BARBER A J
6-1422
BARBER EUGENE JOHN
6-5061 6-5328
BARBER W C
6-3870

BARBERA RICHARD C
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BARBEZAT SUZANNE
6-4011
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6-6645
BARCIA-GOYANES CARLOS
6-2018
BARCLAY F R
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BARENBLATT G I
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BARENDREGT F
6- 437
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6-6418
BARET C
6-1699
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BARFORD N C
6-5802
BARINSKII R L
6- 138
BARKAS WALTER H
6- 298 6- 319 6- 320
6- 322 6- 378 6- 390
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BARKE W
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BARRETT W T
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BARTHOLOMEW G A
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BARTOL RESEARCH FOUNDATION FRANKLIN INST
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BARUCH PIERRE
6-1642
BASINGER CLAIR E
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BASKOVA K A
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BASRI SAUL A
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BASS JEAN
6-4769
BASSHAM J A
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BASSI P
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BASTIN-SCOFFIER G
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BASU D
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BATCHELOR R
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BAXTER I G
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BEETS C
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BEGEMANN F
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BELMONT E
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BERGER L B
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BERGER M R
6-5082
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BERGHOLZ WALTER A
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BERGMAN A G
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BERGMAN STEFAN
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BERGMANN OTTO
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BERKE H L
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BERKEY REYNOLD A
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BERLIN N I
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BERLIN N T
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BERLIN T H
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BERSOHN R
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BERSTEIN IRVING A
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BERTRAND DIDIER
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BETHE H A
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BETZ H
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BEYER G H
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BHABHA H J
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BHATIA A B
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BHATTACHARYA P C
6-1757
BHIDAY M R
6-3710
BHIDE V G
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BHOWMIK B
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BIANCHI A M
6-4836 6-4837 6-6701
BIANCHI ANNAMARIA
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BIANCO D R
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BIBERMAN L M
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BICHSEL H
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BIDDULPH O
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BIEDENHARN L C
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BIERSTEDT M E
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BIGG E K
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BIGGS MAX W
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BILLEN DANIEL
6- 29 6- 47 6-1079
6-1947 6-5280
BILLINGS CHARLES
6-3555
BILLINGS MARTA S
6- 35
BILLION H
6-4377
BILLS C WAYNE
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BILLURIS G
6-5376
BINGGELI E
6-6719
BIOCHEMICAL LAB
PHILADELPHIA GENERAL
HOSPITAL
6-4351
BIOLOGICAL LAB
COLD SPRING HARBOR
6-5546 6-6237
BIOLOGICAL RESEARCH LAB
SOUTHERN ILL UNIV
6-4354 6-4356
BIOPHYSICAL LAB
HARVARD UNIV
MEDICAL SCHOOL
6-2577 6-3620 6-3884
BIRAM J G S
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BIRD R BYRON
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BIRGE ANN C
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BIRKS J B
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BIRNBAUM M
6-3313
BIRNBAUM W
6- 320
BISGARD K MAACK
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BISHOP A S
6- 347 6-3649
BISHOP CHARLES
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6-1500 6-5418 6-5419
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BITTER FRANCIS
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BITTMAN LORAN
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BIZARD CHARLES
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BJERKELUND CHR J
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BLACET F E
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BLACHMAN NELSON M
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BLACK STEWART M
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BLACKBURN PAUL E
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BLACKFORD M E
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BLACKMAN M
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6-2069
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BLAIS ROBERT S
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BLAKE C A
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BLANQUET PAUL
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BLASER J P
6-1021 6-1022
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BLATZ HANSON
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BLEANEY B
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BLEARS J
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BLEECHER H
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BLEULER K
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BLEWETT J P
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BLEWITT T H
6-2520
BLIFFORD IRVING H
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BLIN STOYLE R J
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BLIZARD E P
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BLOCK M M
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BLOM P S
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BLOMEKE J O
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BLOMGREN ROLAND A
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BLONDAL H
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BLOOMFIELD J R
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BLUH OTTO
6-5845
BLUM JACQUES-MARCEL
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BLUM PIERRE
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BLUMENTHAL H J
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BLUMKIN S
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BLUNCK O
6-1889 6-1890 6-1891
6-2213 6-3863
BOAG J W
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BOARTS R M
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6-2276 6-3939
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BOELTER L M K
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BOERSCH H
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BOGANIK N S
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BOGLE G S
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BOHLANDER ADAM
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BOLEY FORREST I
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BOLGIANO P
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BOLLMANN W
6-1007
BOLOMEY RENE A
6-2759
BOLTAKS B I
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BOLTON ELLIS T
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BOLTZ D F
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6-1884
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6- 668
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BOUWMEESTER E
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OF MEDICINE
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BRACE LAB OF PHYSICS
UNIV OF NEBRASKA
6-1528
BRACHER D F
6-2702
BRADDICK H J J
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BROWN UNIV
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BROWN UNIV GRADUATE DIV OF APPLIED MATHEMATICS
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BRUGGEMAN W H
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BRUMMITT HOUSTON
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BRUNO B
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BRYANT BURL E
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BUCK WILLARD E
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6-4904 6-5169
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6-1413

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6-5719
BUILDING MATERIALS
RESEARCH LAB
MASS INST OF TECH
6-1437
BUILDING RESEARCH
ADVISORY BOARD
NATIONAL RESEARCH
COUNCIL
6-5751
BUINOV N N
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BULBRING E
6-3171
BULEY HANS M
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BULLOCK M LOREN
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6-2813
BUMILLER H
6- 522
BUMPS E S
6-3796 6-6034
BUMSTED H E
6-6548
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BUREAU OF MEDICINE
AND SURGERY
DEPT OF THE NAVY
6-5721
BUREAU OF MINES
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6-1627 6-1727 6-2862
6-3737 6-3782 6-4491
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BUREAU OF MINES
BLUEMONT VA
6-1401
BUREAU OF RECLAMATION
DEPT OF THE INTERIOR
6-5597
BUREAU OF YARDS AND
DOCKS
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BURFORD W B III
6-1570
BURG ANTON B
6-2317
BURGE E J
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6- 71
BURROW J H
6-1804
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BUSCH ARTHUR W
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BUSCH J S
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BUSSO R H
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BUTLER C C
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BUYLE-BODIN MAURICE
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BUYS W L
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BUZARD JAMES
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BYERRUM RICHARD U
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BYFIELD H
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BYFLEET G
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BYRON E S
6-3292

CABELL M J
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CAFFARATTI ENRICO
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CAGLE CHARLES D
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CALIFORNIA INST OF TECH
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BERKELEY
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COLL OF AGRICULTURE
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SCHOOL OF MEDICINE
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EXPERIMENT STATION
RIVERSIDE
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DENTISTRY
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CALIFORNIA UNIV DAVIS
6-4364
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COLL OF AGRICULTURE
6-4385
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DIV OF ANIMAL
HUSBANDRY
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CALIFORNIA UNIV DIV OF
MEDICAL PHYSICS
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CALIFORNIA UNIV
LOS ANGELES
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LOS ANGELES
SCHOOL OF MEDICINE
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CALKINS G D
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CAMAC M
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CAMBRIDGE UNIV ENGLAND
6-6603
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CANCER RESEARCH INST
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CARBIDE AND CARBON CHEMICALS CO K-25
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CARNEGIE INST OF TECH
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CARPENTER J E
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CARR HOWARD
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CARRIERE
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CASATI ANNIBALE
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CASE J M
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CASE INST OF TECH
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CASTAGNOLI C
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CASTOR C R
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CASWELL A E
6- 59
CASWELL RANDALL S
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CATALANO EDWARD
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CATCH J R
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CATHEY W J
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CATHOLIC UNIV OF AMERICA
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CAUCHOIS Y
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CAVE G C B
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CAWTHRON INST
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CAYER DAVID
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CECCARELLI M
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CECCHINI LOUIS P
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CEMBER HERMAN
6-3887
CENTRAL AEROSOL LABS COLUMBIA UNIV
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6-3306 6-4091
CENTRAL AIR DOCUMENTS OFFICE
6- 274
CENTRE DE PHYSIQUE NUCLEAIRE DE L UNIVERSITE LIBRE DE BRUXELLES
6-5989 6-6006 6-6052
CERRAI E
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CERWONKA EDWARD
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CHALK RIVER PROJECT CANADA
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CHALMERS T A
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CHAMBERLAIN A C
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CHAMBERLAIN, OWEN
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CHAPMAN JUANITA B
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CHEBINIAK P
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CHELDELIN VERNON H
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CHELEMER H
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CHELISHCHEV E V
6-3275
CHEMICAL AND RADIOLOGICAL LABS ARMY CHEMICAL CENTER
6-1611 6-2135 6-2136
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CHEMICAL CORPS
6- 183
CHEMICAL LAB ILLINOIS INST OF TECH
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CHEMLA MARIUS
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CHEN N K
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CHICAGO UNIV
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CHIOTTI P
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6-1990
CHMUTOV K V
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CHOPPIN GREGORY R
6-1125
CHORNEY WILLIAM
6- 163
CHOU C N
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CHOUTEAU JACQUES
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CHOYKE WOLFGANG J
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CHRISTENSEN BERT E
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CHRISTENSEN ERIC
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CHRISTIE M I
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CHRISTS COLL
CAMBRIDGE UNIV ENGLAND
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CHUKHANOV Z F
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CHUN H E
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CHUPKA WILLIAM A
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CHURCH E L
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CHUTE ROSANNA N
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CHYNOWETH A G
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CIBULA A
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CLABAUGH W J
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CLADIS JOHN BAROS
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CLEARY GEORGE
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CLELAND M R
6-6417
CLEMENT J R
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CLENDENIN W W
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CLENSHAW W J
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CLEVELAND FORREST F
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CLEWS C J B
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CLINTON LABS
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CLOSMANN PHILIP
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CLUSIUS KLAUS
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COATES G E
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COBAS AMADOR
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COBB JOSEPH B
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COLBURN CHARLES B
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COLGATE STIRLING A
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COLLEGE OF PHYSICIANS
AND SURGEONS NEW YORK
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COLLEGE OF SCIENCES AND
ARTS STATE COLL OF
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COLLOID RESEARCH LABS
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COLNER WILLIAM H
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COLOMBO S
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COLORADO AGRICULTURE
AND MEDICAL COLL
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COLORADO UNIV
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COLUMBIA RADIATION LAB
COLUMBIA UNIV
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COLUMBIA UNIV
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COLUMBIA UNIV
SCHOOL OF MINES
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COLVIN T H
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COMBS J F
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COMMITTEE ON THE BASIC PROPERTIES OF LIQUID METALS OFFICE OF NAVAL RESEARCH
6-6604
COMTE CHARLES
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CONANT L C
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CONARD G P
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CONCORDIA COLL
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CONGER ALAN D
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CONNECTICUT AGRICULTURAL EXPERIMENT STATION
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CONNECTICUT UNIV
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COOL R L
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COON MINOR J
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COOPEY R W
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COPHER GLOVER H
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COPLEY ALFRED L
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COPPENS RENE
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CORBEN H C
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CORDOVI M A
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CORINALDESI E
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CORY ROBERT
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COTE G L
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COTTIN MAURICE
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COULTAS T A
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COULTER MOLLY P
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COUPER M
6-3459
COURANT ERNEST D
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COURANT HANS
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COWING RUSSELL F
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COWPER G
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COX J A M
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COX R J
6-2971
CRAFT A
6- 348
CRAGGS J D
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CRAIG D S
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CRAIG H
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CRAIG J T
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CRAIG R S
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CRAIG W J
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CRAMER E M
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CRAMER H E
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CRAMER HANS
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CRANDALL W B
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CRANDALL WALTER ELLIS
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CRANE FRANK
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CRANE H R
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CRATHORN A R
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CRAWFORD BRYCE L JR
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CRAWFORD J H JR
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CREUTZ E
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CREUTZ E C
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CREVECOEUR E
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CRICK JOAN
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CRITCHFIELD C L
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CROATTO UGO
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CROCE ROMEO
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CROCKER LAB UNIV OF CALIF BERKELEY
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CROMPTON CHARLES E
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CRONKITE E P
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CROOKS H E
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CROSBY E H
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CROSS WILLIAM G
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CROSSLEY F A
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CROTTY HOMER D
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CROUCH MARSHALL F
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CROUTHAMEL CARL E
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CROWDER MARIETTA
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CROXTON FRED E
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CRYOGENIC LAB
OHIO STATE UNIV
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CURTIS C E
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CURTIS M L
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CURTISS CHARLES F
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CURTISS L F
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CUSMANO L
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CUSTER ROBERT L
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CYNARSKI J
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CYPRES R
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DAANE ADRIAN H
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DABAGIAN H J
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DABAKHYAN M M
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DADAYAN A
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DAGAN M B
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DAGGS V M
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DAHL HARRY M
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DAINTON A D
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DALE WALTER M
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DALGARNO A
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DALITZ R H
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DATSEV A B
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DE LABOULAYE H
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DE LA GARZA A
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DEPARTMENT OF MINES AND TECHNICAL SURVEYS CANADA
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DESIGNERS FOR INDUSTRY INC
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DESTOUCHES-FEVRIER PAULETTE
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DE WAARD H
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DICKE R H
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DIETRICK HARRY
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DIGGES THOMAS G
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DIJKER A J
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6-3918
DILLING E D
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DILTS R V
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DI MARCO A
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DIPPEL W A
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DI PRISCO LUIGI
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DIRAC P A M
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DIRITO V L
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DISERENS H W
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DISMUKE N
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DISSANAIKE G A
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DISTEFANO VICTOR
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DITMARS WALTER E
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DIVISION OF RAW MATERIALS AEC
6- 212
DIVISION OF RESEARCH AEC
6-1487
DIXON D
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DOBBINS WILLIAM E
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DOBBS E R
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DOMINE-BERGES MARTHE
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DOMOTOR P
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DONAHOE F J
6-2945
DONAHUE D J
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DONAHUE T M
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DONALDSON DAVID D
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DONNER LAB UNIV OF CALIF BERKELEY
6-3482
DONOVAN B
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DORFMAN L M
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DOSSEY JAMES L
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DOWNES K W
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DOWNS W L
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DOYLE OWEN W
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DRAIN L E
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DREBLOW W
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DRELL S D
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DREYFUS-ALAIN BERTRAND
6-6573
DRICKAMER H G
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DROPESKY BRUCE
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DROUARD R
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DRUCKER D C
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DUBE G P
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DUBININ G N
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DUDLEY ROBERT AUGUR
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DUGDALE R A
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DUMOND JESSE W M
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DUNBAR D N F
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DUPRE LA TOUR F
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DUQUESNE MAURICE
6-3364
DURBIN R
6- 329
DURIE R A
6-2032
DUTCHER R
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DUTINA DRAGOMIR
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DUTLI JAMES W
6-1971
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DUTREIX J
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EBEL R A
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EBERHARDT W H
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EBERLE ALLAN R
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EBNOTHER A
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ECKERT E R G
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ECKERT ROGER E
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EL-ABBADY M
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EL-BEDEWI F A
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ELECTRONA CORP
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ELECTRONIZED CHEMICALS
CORP
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ELEY D D
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ELY RALPH JR
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EMORY UNIV
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ENATSU HIROSHI
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ENDT P M
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ENERSON DANIEL M
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ENGE H A
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ENGEL S
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ENGELKEMEIR DONALD W
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ENGINEERING RESEARCH
INST UNIV OF MICHIGAN
6- 916 6-1756 6-2356
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ENGLAND ROBERT D
4-1799
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ENGSTROM ARNE
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ENGSTROM R W
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ENLUND H L F
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ENNS J H
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ENSLEIN KURT
6-2998 6-2999 6-6105
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ENVIRONMENTAL HEALTH
CENTER
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EPP E R
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EPPELSHEIMER D S
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EPREMIAN E
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ERICKSON A J
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ERSKINE G A
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EVDOKIMOVA T P
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EVERHART EDGAR
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EWING CURTIS T
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EWING J F
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EXPLOSIVES RESEARCH AND
DEVELOPMENT
ESTABLISHMENT
WALTHAM ABBEY ESSEX
ENGLAND
6-1991
EXTERMANN C R
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EYERLY G B
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EYRING HENRY
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EYRING LEROY
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EZRAN MAURICE
6-4054

FABBRICHESI L
6-2961
FABITSCHOWITZ H
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FAILLA G
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FAINBERG JOSEPH
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FAINBERG V YA
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FAIRSTEIN E
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FALK C E
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FALK GOTTFRIED
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FALTINGS V
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FANO U
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CORP
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FAX DAVID H
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TELECOMMUNICATION
LABS INC
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KISTIAKOWSKY
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GATES E
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GATES AND CRELLIN LABS
OF CHEMISTRY
CALIF INST OF TECH
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GAUDEFROY GHISLAIN
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GAUME-MAHN FRANCOISE
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GAUNT J
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GAUS HEINRICH
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GAUTHE BERNARD
6-4976
GAUTIER PIERRE
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GAUZIT JUNIOR
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GAUZIT MAURICE
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GAVORET G
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GENERAL ELECTRIC CO
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RESEARCH LAB
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GENERAL ENGINEERING LAB
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GEOFFRION CLAUDE
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GEOLOGICAL SURVEY
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GEORGE WASHINGTON UNIV
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FOUNDATION FOR MEDICAL
RESEARCH
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KHODAKOV A L
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KHODAKOV G N
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6- 421
KHOLODOVSKII G E
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KHUDYAKOV G N
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KHYM JOSEPH X
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KICHENASSAMY S
6-1361 6-2765 6-3429
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6-5041
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LABELLE CHARLES W
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LABERRIGUE-FROLOW JEANNE
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LABEYRIE JACQUES
6- 587 6- 666 6-4873
LA BLANCHETAIS CHARLOTTE
HENRY
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MASS INST OF TECH
6-3297
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LABRUM N R
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LAGERGREN STIG
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LAKSHMINARAYANA D
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6- 666
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LAMONT GEOLOGICAL
OBSERVATORY
COLUMBIA UNIV
6-5598
LAMP BEVERLY
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LANDIS F P
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LANGER LAWRENCE M
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LANGHAAR HENRY
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LANGHAM WRIGHT
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LANGLEY AERONAUTICAL LAB
NACA
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LANGLEY MEMORIAL
AERONAUTICAL LAB NACA
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LANGSDORF ALEXANDER JR
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LANIER MARY LOUISE
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LANKENAU HOSPITAL
RESEARCH INST
PHILADELPHIA
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LANSING NEAL F
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LAST GEORGE A
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LA TORRE PHILIP
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LAUER EUGENE J
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LEAR H
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LE BERQUIER F
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LESLIE W B
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LETORT MAURICE
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LEVIN DANIEL H
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LEWIS ALVIN E
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LEWIS FLIGHT PROPULSION
LAB NACA
6- 860 6- 866 6- 867
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LEXINGTON PROJECT
6-5369
LEYSHON W E
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LI CHOH HSIEN
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LI LIANG
6-5761
LIANG C Y
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LIBBY RAYMOND L
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LIBBY W F
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LIMPEROS G
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LINDELL BO
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LINDEMANN BRUNO
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LINDHOLM EINAR
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LIPP MARIA
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LIPPS F
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LISCHI GIANCARLO
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LISTER B A J
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LITTLE ARTHUR D INC
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LOCK W O
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LOFTNESS R L
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LOGAN ALBERT V
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LOGAN R A
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LOHMAN C
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LOKAJICEK M
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LOLIGER H
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LONG ISLAND BIOLOGICAL
ASSOCIATION
COLD SPRING HARBOR
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LONSJO OLE
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LORING B M
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LORRIS S G
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LOS J M
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LOS ALAMOS SCIENTIFIC LAB
6- 30 6- 191 6- 294
6- 334 6- 505 6- 593
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LOUISIANA STATE UNIV
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LOUISVILLE UNIV
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LOVELL CALVIN H
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LOVERDE A
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LOVINGTON J A
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LOVTRUP SOREN
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LOW A J
6-1984
LOW J R JR
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LOW WILLIAM
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LOW-BEER BERTRAM V A
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LOWAN ARNOLD N
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LOWDERMILK WARREN H
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LOWDIN PER-OLOV
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LOWRIE R S
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LUCAS H F
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LUCHKIN G P
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LUCKS C F
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LUMRY RUFUS
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LUNCHICK M E
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LUNDY A
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LURCAT FRANCOIS
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LUSHBAUGH C C
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LYMAN E M
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LYNTON E A
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LYON RICHARD N
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LYTLE W J
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LYUBIMOVA E A
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MA S T
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MCADAMS GEORGE B
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MCALLISTER S A
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MACARA R
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OAK RIDGE INST OF
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PRINCETON UNIV
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PANOFSKY WOLFGANG K H
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PAOLETTI MARIO
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PAOLO BRAGGION
6-3169
PAPP C A
6- 898 6-2378
PAPP G
6-3340
PAPPAS ALEXIS C
6-5189
PARFIANOVICH I A
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PARIS C H
6-5642 6-5681 6-5684
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6-4648
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PARKINS W E
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PARKINSON W C
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6-5601
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PARSONS R J
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PARTRIDGE WILLIAM S
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PARUNTSEVA R
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PASCAUD CLAUDE
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6-1858
PASSALACQUA F
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PATERSON EDITH
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PATTERSON WILLIAM JR
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PAUL M
6-1860
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6-3862
PAWLICKI G S
6-3471

PAXSON D
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PAYNE ANITA H
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PAYNE P R
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PEACOCK J M
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PECK R L
6-4761
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6-2981
PELIKAN W
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PENNSYLVANIA STATE COLL
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AND PHYSICS
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SCHOOL OF MINERAL
INDUSTRIES
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PENNSYLVANIA UNIV
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SCHOOL OF MEDICINE
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PERIN L
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PERIO P
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PERKINSON JESSE D JR
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PERLMAN I
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PERLS THOMAS A
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PERNEGR J
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PERRINGS J D
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PERRY C L
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PERSICO ENRICO
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PERSSON R
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PESHKIN MURRAY
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PETCH H E
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PETERMANN A
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PETERMANN MARY L
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PETERS ARTHUR C
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PETERS B
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PETERSON DOROTHY C
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PETERSON S W
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PETIT GEORGES
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PETRETIC G J
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PETRIE D P R
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PETSCHEK ALBERT G
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PETTERS L B
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PEYROU CHARLES
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PFIRSCH D
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PFLASTERER JAMES L
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PFOTZER GEORG
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PHARES E F
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PHILADELPHIA GENERAL
HOSPITAL
6-3488 6-5258
PHILADELPHIA GENERAL
HOSPITAL DIV OF
BIOCHEMISTRY
6-3735
PHILBERT GEORGES
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PHILIPS GEORGE
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PHILLIPS CHARLES W
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PHILLIPS G
6- 576
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PHILLIPS GEORGINE
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PHILLIPS H BRUCE
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PHILLIPS OIL CO
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PHILLIPS R D
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PHILLIPS ROBERT HASTINGS
6- 362 6-4617
PHILLIPS RUSSELL C
6-4440
PHILLIPS W D
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PHIPPS T E JR
6-5465
PHYSICAL METALLURGY LAB
CALIF INST OF TECH
6-4784
PIATIER HENRI
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PIATT D
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PICCHIO CARLO
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6- 36
PICHAT L
6-1699 6-5077
PICKAVANCE T G
6-1883 6-1887 6-5907
PICKLE C B
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6-4821
PIDGEON L M
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PIENKOWSKI S
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PIERCE CONWAY
6-4019

PIERCE FRANK T JR
6- 38 6-3482
PIERCE JOHN A JR
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PIERCE RUSSELL W
6-3253
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6-4840 6-4907
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PIETRUCK CHRISTEL
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PIGG J C
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PIGNEDOLI ANTONIO
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PIKE R
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PILKINGTON E S
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PILZ W
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PINES B YA
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PINES DAVID
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6-1992
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PINSKY-MOORE
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PINSON ERNEST A
6-1981
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PIRENNE JEAN
6-3879
PITMAN-DUNN LABS
FRANKFORD ARSENAL
6-3739
PITT-RIVERS ROSALIND
6-5972
PITTER J
6-5015
PITTSBURGH UNIV
6- 91 6- 235 6-1472
6-1632 6-1654 6-2251
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PITTSBURG UNIV SCHOOL OF
MEDICINE
6-4341 6-4381 6-4386
PITZER E C
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PLACAK OLIVER R
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PLACZEK G
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PLAN MAX
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PLATT J B
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PLOCH WERNER
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PLUMLEE M P
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PLYLER EARLE K
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POCHAPSKY T E
6- 580
POCHIN E ERIC
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PODGORETSKII M I
6-3594
POEL L W
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POIANI G
6-4832 6-4838 6-6634
POLAROID CORP
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POLICARD A
6-3940
POLLARD ERNEST C
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POLLARD H V
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POLLOCK FRANKLIN
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POMERAT C M
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POMONA COLL
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POMPER SEYMOUR
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POND R B
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POND T A
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POND VIRGINIA
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PONS J T
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PONZIO M
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POOL M L
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POOLE D M
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POPJAK G
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POPLE J A
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POPPENDIEK H F
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PORITSKY H
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PORTER EDWARD C
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PORTER PAUL EDWARD
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POST BENJAMIN
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POST R F
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POTOCKI RITA M
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POWLES J G
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PRANATIS A L
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PRANDTL WILHELM
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PRATT P L
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PRAY H A
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PRAYTOR E H
6- 31
PREISER STANLEY
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PREISWERK PETER
6- 419 6- 434 6-1836
6-1923 6-5513
PRENTICE T C
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PRESBYTERIAN HOSPITAL
CHICAGO
6- 565
PRESCOTT C H JR
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PRESCOTT J R
6-1915 6-3601
PRESENT R D
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PRESENZ C S
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PRESS E M
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PRESSMAN DAVID
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PRESTON M A
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PRESTWICH G D
6-6187
PRESTWOOD R J
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PREUSS LUTHER E
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PRICE B T
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PRICE FRASER P
6-2034
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PRICE P J
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PRICE ROBERT
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PRICE T D
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PRICE TERENCE
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PRIEDIGKEIT J
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PRIMAKOFF H
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PRINCETON UNIV
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PROPER J
6-4878

PROSCHAN F
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PROSSER H C
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PRUETT C H
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PRUGNE PIERRE
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PRUITT J S
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PRZIBRAM KARL
6- 142
PUCHEAULT J
6-5066 6-5067
PUERTO RICO UNIV
6- 610
PUGET
6-5028
PULLIN V E
6-3741
PUPPI G
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PURCELL E M
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PURDUE RESEARCH FOUNDATION
6-6412 6-6705 6-6706
PURDUE UNIV
6-1840 6-3411 6-3854
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PURSEY D L
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PURUSHOTTAM A
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PYCHLAU H
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QUARANTA A ALBERIGI
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QUINTON A
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RABINOVITCH B S
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6-5296
RADHAKRISHNA P
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RADIATION LAB
UNIV OF CALIF BERKELEY
6- 14 6- 38 6- 92
6- 93 6- 123 6- 152
6- 153 6- 167 6- 168
6- 254 6- 278 6- 284
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6-6695 6-6696 6-6697
RADIATION PHYSICS LAB
NATIONAL BUREAU OF STANDARDS
6-4578
RADICATI L A
6-4910 6-5478 6-5667
RADIO CORP OF AMERICA
6- 638
RADIOLOGICAL RESEARCH LAB COLUMBIA UNIV
6-5716
RADIOPHYSICS LAB
UNIV GROUNDS SYDNEY AUSTRALIA
6- 939 6- 940
RADISHCHEV V P
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RADUSHKEVICH L V
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RADVANYI PIERRE
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RAE E R
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RAFELSON MAX E JR
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RAFFLE J F
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RAINWATER JAMES
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RAINWATER L J
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RAJEWSKY B
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RALL J E
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RALL WALDO
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RAMAKRISHNAN T
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RAMAT M
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RAMBACH W A
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RAMIREZ-MUNOZ J
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RAMSKILL EUGENE A
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RAND CORP
6-1589 6-1709 6-5662
RANDAL MORGAN LAB OF PHYSICS UNIV OF PENNA
6-4944
RANDELL C P
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RANDERS GUNNAR
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6-4321
RAPOPORT HENRY
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RAPPOPORT I D
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RASETTI F
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RASKIN ANDRE
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RASMUSSEN J
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RASMUSSEN JOHN OSCAR JR
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RATHGEBER H D
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RATIER J
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RAUCH ROBERT F
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RAUMANN GERTRUD
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RAVENHALL D G
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RAVERY MICHAEL
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RAVILIOUS C F
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RAWSON RULON W
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RAY FRANCIS E
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RAY W E
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RAYNER BARBARA
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RAYSKI J
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RCA LABS DIV RADIO
CORP OF AMERICA
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RCA VICTOR DIV
RADIO CORP OF AMERICA
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READ ALVIN A
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RECHENMANN ROGER
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RECORD F A
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REDDEN THOMAS
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REDHEAD P A
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REDLICH MARTIN G
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REDMAN C
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REDMOND R F
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REID A F
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6- 789
REID J D
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RESEARCH AND DEVELOPMENT
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RESEARCH FOUNDATION
OHIO STATE UNIV
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RESEARCH LAB OF
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MASS INST OF TECH
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RHEUMATIC FEVER RESEARCH
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UNIV MEDICAL SCHOOL
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RHINES F N
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RIESKE JOHN S
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ROCHESTER UNIV
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ROGERS R W
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ROGOZINSKI ANATOLE
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ROHRLICH F
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ROHSENOW WARREN M
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ROLLOSSON GEORGE W
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ROMAN P
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ROMAND JACQUES
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ROMANINI A
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RONA ELIZABETH
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RONZIO ANTHONY R
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ROOT ROBERT E
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ROSENFELD A H
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ROSENHEAD L
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ROSENKRANTZ J A
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ROSENTHAL ISADORE
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ROSSI H H
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ROTH E
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ROUND HILL FIELD STATION
MASS INST OF TECH
6-6673
ROUNDS DONALD E
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ROWAN R JR
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ROWBOTTOM J
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ROWE JACK J
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ROWELL JOHN B
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ROY-CHOUDHURY R N
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ROYAL AIRCRAFT
ESTABLISHMENT
FARNBOROUGH HANTS
ENGLAND
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ROZENTHAL I L
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SABINE JEAN CAPTAIN
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UNIV OF PITTSBURGH
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SCHWEITZER GEORGE K
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SCHWINGER JULIAN
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WESLEYAN UNIV
MIDDLETOWN CONN
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SCOVIL H E D
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SCOVILLE C L
6-3115
SCULLY NORBERT J
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SEABORG GLENN T
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SEAGONDOLLAR L W
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SEAGRAVE JOHN D
6-1879 6-2188
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SEDGWICK LABS OF
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MASS INST OF TECH
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SEEBOLD ROBERT E
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SEEGER ALFRED
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SEELY BEN K
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SEKI S LOUISE
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SELBY J D
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SELIGMAN HENRY
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SELOVE W
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SEMCHYSHEN M
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MASS INST OF TECH
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SIDLES PAUL H
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SIMMEL E B
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SIMMONS D H
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YALE UNIV
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SNAVELY C A
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SNYDER W S
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SOBCZYK ANDREW
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SOKOLOVA Z S
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SOLID-STATE AND
MOLECULAR THEORY GROUP
MASS INST OF TECH
6-4179 6-6674
SOLOMON A K
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SPAIN PATRICIA
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UNIV OF CHICAGO
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AMERICAN CYANAMID CO
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STANDIL S
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ENGINEERING MECHANICS
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OF MINERAL SCIENCES
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STEPHAN H R
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STERLING JAMES T
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STERLING CHEMISTRY LAB
YALE UNIV
6-3747
STERN ALEXANDER W
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STERN C
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STIEHL GEORGE L
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STODDART H F
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STRAIN HAROLD H
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STRANDBERG M W P
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STRASHKEVICH A M
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STRATTON K
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STRAUBE R L
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STRAUCH K
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STRAUSER W A
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STRENG A G
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STROKE H H
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STRUPPLER ALBRECHT
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STUBBS M F
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STUMPF F B
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STUTZ R E
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STYRIKOVICH M A
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SUDDATH J C
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SUDRABIN LEON P
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SUESS HANS E
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SUGAR EDITH
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SUGARMAN NATHAN
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SUGIMOTO ASAO
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SUGIMOTO TAIRA
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SUITER J W
6-4513
SUITS C G
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SULLIVAN BARBARA A
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SULLIVAN J C
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SULLY A H
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SUMMERS-GILL R G
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SUMMERS-SMITH D
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SUN K H
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SUNDER JOSEPH H
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SUPPLEE HELEN
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SURDIN M
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SURYANARAYANA T V S
6-2015
SUSANO C D
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SUSSMANN G
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SUSZKIN ANATOL
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SUTCLIFFE T
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SUTRA GENEVIEVE
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SUTTLE JOHN F
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SUTTON ELIZABETH
6-5010 6-6539
SUTTON J
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SUTTON W B
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SUURA HIROSHI
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SUWA SHIGEKI
6-2794 6-3839 6-6158
SUZOR FRANCIS
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SVEC HARRY J
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SVEJDA J
6-5015
SVERDLOV L M
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SVIHLA G
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SWAIN A J
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SWAIN PATRICIA
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SWALLOW A J
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SWAMI M S
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SWAN G A
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SWANK ROBERT K
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SWANSON C P
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SWEETON F H
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SWICK ROBERT W
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SWIM RICHARD T
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SWINDELLS J F
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SWISHER S N
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SYDORIAK S G
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SYLVANIA ELECTRIC
PRODUCTS INC
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SZEKI PALMA
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SZYMKO C T
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TABACHNICK M
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TABER KENNETH W
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TABERN D L
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TABOR HERBERT
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TAFT ROBERT W JR
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TATA INST OF FUNDAMENTAL
RESEARCH BOMBAY INDIA
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TAUZIN PIERRE
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TAVORA ELYSIARIO
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TAYLOR ALBERT E
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TAYLOR ROBERT P
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TAYLOR WARREN E
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TECHNICAL INFORMATION
SERVICE AEC
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TEMPLE R B F
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TEMPLETON CHARLES C
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TEMPLETON D H
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TENNESSEE UNIV
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TENNESSEE VALLEY
AUTHORITY
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TESKE ARMIN
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TEXAS AGRICULTURAL
EXPERIMENT STATION
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TEXAS UNIV
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THARRATS VIDAL JESUS M
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THELLUNG A
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THERMODYNAMICS RESEARCH
LAB UNIV OF PENNA
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THERON P
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THEWLIS J
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THIBAUD J
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THIE JOSEPH A
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THIRRING WALTER E
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THODAY J M
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THODE H G
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THOUVENIN JACQUES
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TORONTO UNIV CANADA
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GREAT BRITAIN
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UNIV OF PENN
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TSYURUPA I G
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ULTRASONIC AND
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6- 498 6- 534 6- 540
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VAINSHTEIN E E
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VIGNERON LEOPOLD
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VISCONTI ANTOINE
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VITRO CORP OF AMERICA
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VOIGT A
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WASHINGTON SQUARE COLL
OF ARTS AND SCIENCES
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WEISSBLUTH M
6-2165
WEISSKOPF V F
6-1522
WEISSLER G L
6-6097
WEISSMAN RICHARD
6-6398
WEISSMAN S I
6-6528
WELCH W M MANUFACTURING
CO
6-4868
WELKER JOAN P
6-1123
WELLCOME RESEARCH LABS
6-1112 6-5531
WELLER JOHN M
6- 791 6- 793
WELLS F H
6- 943 6-5440
WELLS J C
6-6548
WELLS R J
6-3778
WELLS W E
6-4491
WELLS WARNER
6-6257
WELTON T A
6-4264
WENDER SIMON H
6-1969 6-1970
WENGERT GLENN B
6-6310 6-6543
WENNER CHARLES E
6- 760 6- 761 6-6239
WENTZEL G
6-4164 6-4608
WENZEL W A
6-5500
WENZL F
6-3415
WERGELAND H
6-3328
WERKMAN C H
6-2561 6-5530
WERLE J
6-5244
WERNER L B
6- 468
WERNER SIDNEY C
6-3932 6-6286
WERNET JOSEF
6-2344
WERT C
6-2214
WERTZ JOHN E
6-5772
WERZ J F C
6-5958
WESLEYAN UNIV
6-6675
WESSEL GUNTER
6-3400
WEST D
6-5698
WEST EDWARD S
6-3952 6-4718
WEST HAROLD D
6-5945
WEST PHILIP W
6-4734
WEST R
6-5134
WEST T S
6-3236
WESTERMARK TORBJORN
6-5093
WESTERN RESERVE UNIV
6- 868
WESTERN RESERVE UNIV
SCHOOL OF MEDICINE
6- 33 6- 50 6- 546
6-1378 6-5265 6-5266
6-5429 6-6293
WESTHEIMER F H
6-5733
WESTINGHOUSE ATOMIC
POWER DIV
6- 893 6-2664 6-2708
6-2713 6-2771 6-2772
6-3104 6-5375
WESTINGHOUSE ELECTRIC
CORP
6-3404
WESTINGHOUSE RESEARCH
LABS
6-1484
WESTON RALPH E JR
6-3516 6-5350 6-6144
WESTPHAL K
6-1891
WESTPHAL W B
6-3297
WESTRUM EDGAR F JR
6-2903 6-4037
WETHERILL GEORGE
6- 972
WEXLER AARON
6-1739
WEXLER B C
6-1956
WEXLER SOL
6-1420 6-3761 6-5696
6-5697
WEYGAND FRIEDRICH
6- 569 6- 853
WEYL W A
6- 116 6- 117 6- 118
6- 119 6-3709 6-5732
6-5984
WHALING WARD
6-1859 6-5500
WHEATLEY JOHN C
6-3819
WHEELER CHARLES M JR
6-2296
WHEELER G W
6-6151 6-6190
WHEELER H BROWNELL
6-6289
WHEELER H E
6-4387
WHEELER H L JR
6-1196 6-1234
WHEELON O A
6- 906
WHIPPLE G HOYT
6-3489
WHITAKER W M
6-4706
WHITCHER S L
6-2042 6-5343
WHITCHER STANLEY L
6-1343
WHITCOMBE DAVID W
6-4915
WHITE ALBERT EASTON
6-1207 6-5381
WHITE D F
6-1088 6-2353
WHITE DAVID
6-6554
WHITE GLADYS R
6-5685
WHITE J C
6-4751
WHITE M G
6-1887 6-6694
WHITE MARCIA R
6-1615 6-1616 6-2576
6-3206 6-4714
WHITE R STEPHEN
6- 324 6- 671
WHITE ROBERT R
6-6112
WHITE SIDNEY
6- 19
WHITE WILLIAM C
6-1421
WHITEHEAD MARIAN N
6- 669 6-4595
WHITEHOUSE W J
6-1851 6-3410 6-6670
WHITHAM G K
6-4476 6-5364 6-5365
WHITMORE F C
6- 130

WHITTEMORE O J JR
6-2919
WHITTEMORE W L
6-2391 6-4591 6-5455
6-6465
WIBERLEY STEPHEN E
6-5424
WICHERS EDWARD
6-3972
WICK GIAN CARLO
6-1544 6-2798 6-6488
WICKMAN FRANS E
6-3569 6-5256
WIDDOFF M
6-1812
WIED GEORG L
6- 52
WIEDENBECK M L
6-4253 6-5835
WIEGAND C E
6-3473 6-3478 6-4320
WIESNER J B
6-1750 6-4085 6-5789
WIGHTMAN A S
6-6482
WIGNER E P
6-1839 6-4611 6-5202
6-6488
WIIG EDWIN O
6-5875
WIJNEN M H J
6-2877
WIJSMAN R A
6- 777
WILBERG CH
6-3494
WILBUR KARL M
6-1590
WILCOX HOWARD A
6- 297 6-2165
WILCOX L
6-2409
WILD ROBERT LEE
6- 400
WILDE W S
6-1077
WILDER C D
6-1569
WILDHORN SORREL
6-4771
WILDING JAMES L
6-4706 6-5255 6-5268
WILETS L
6-1930
WILEY RICHARD H
6- 851
WILHELM HARLEY A
6- 276 6-1988 6-2336
6-4308 6-4309 6-6213
WILHELM RICHARD
6-5345
WILKE CHARLES R
6-3806
WILKENING M H
6-5438
WILKINS C J
6- 133
WILKINS J ERNEST JR
6- 384 6-1285 6-3622
WILKINS J J
6- 699 6- 709 6-3685
6-4943 6-5884
WILKINSON D H
6-1861 6-3850 6-3851
6-4636 6-6161 6-6666
WILKINSON G
6-1857
WILKINSON K L
6- 639
WILKINSON PAUL N
6-3924
WILKINSON R G
6-1352
WILLARD H B
6-1535 6-2756 6-3079
6-3084 6-3849
WILLARD JOHN E
6-1659 6-2894 6-3769
6-4031 6-5342 6-5580
6-6566
WILLIAM H CHANDLER LAB
LEHIGH UNIV
6-5349
WILLIAMS A F
6-4016 6-5071 6-5072
6-6308
WILLIAMS ARTHUR H
6- 430
WILLIAMS C
6-2064
WILLIAMS D LLOYD
6-2053 6-4022 6-4026
6-5075
WILLIAMS D N
6-3795
WILLIAMS DALE D
6-1237 6-5569
WILLIAMS DUDLEY
6-5352
WILLIAMS E K
6-3184
WILLIAMS I
6-1600
WILLIAMS J H
6-1503 6-1867
WILLIAMS JOE L
6-2617 6-2640
WILLIAMS JOHN H
6-3692
WILLIAMS ROGER D
6-1103
WILLIAMS RUSSELL R JR
6-4001 6-4002
WILLIAMS VAN ZANDT
6-3614 6-3768
WILLIAMS W S C
6- 370
WILLIAMSON G K
6- 605 6- 606
WILLIAMSON LAURA
6-3979
WILLIG F J
6-3301 6-4521
WILLMORE TRACY A
6-1216
WILMOT R D
6-3568 6-5775
WILSON A C JR
6-5576
WILSON A H
6-1772
WILSON A J C
6-2208
WILSON ALLAN
6-3230
WILSON C W
6- 392 6-2155 6-6463
WILSON E BRIGHT JR
6-1417 6-4913
WILSON ELIZABETH
6- 734
WILSON H A
6- 992
WILSON H W
6-1559 6-5915
WILSON HERBERT B
6-1089 6-4715
WILSON IRWIN
6-3800
WILSON J E
6-6010
WILSON J G
6-1824 6-5409 6-5627
6-5850 6-6137
WILSON J W
6-5545
WILSON R H
6-3774
WILSON RICHARD
6- 337
WILSON ROBERT R
6-3408 6-3814 6-3816
6-6226
WILSON WILLIAM JR
6-4786
WILZBACH KENNETH E
6-1176 6-3671 6-6527
WINAND L
6-5837
WINAND LEON
6-5205
WINCKLER J R
6-2964 6-2965
WINGO W J
6-4890
WINKEL P
6-6378
WINKLER H
6-1884
WINNICK T
6-4468
WINNINGSTAD C N
6-4960
WINSLOW G H
6-6188
WINSOR FREDERICK J
6- 888
WINTER E R S
6-3977
WINTER ROLF G
6-2779 6-2781
WINTERINGHAM F P W
6-5084
WINTERSTEIGER V
6-5644
WINTHER AAGE
6-4254 6-4262
WINZLER RICHARD J
6- 72
WIRTA R W
6-4477
WIRTH H
6-6591
WISCHHUSEN E
6- 272
WISCONSIN UNIV
6- 79 6- 335 6- 536
6- 985 6- 986 6- 987
6-1636 6-1659 6-1838
6-2124 6-2342 6-2471
6-3392 6-3686 6-3769
6-4015 6-4031 6-4119
6-4389 6-5342 6-5460
6-5461 6-5471 6-5473
6-5580 6-5680 6-6012
6-6373 6-6454 6-6617
6-6648
WISCONSIN UNIV
COLL OF AGRICULTURE
6- 71
WISCONSIN UNIV MEDICAL
SCHOOL
6-3922
WISE E M
6- 805
WISE HENRY
6-4421
WISER WENDELL H
6-1426
WISH LEON
6-1985 6-3210
WISKOTT DETMAR
6-4652
WISNIEWSKI FELIX JOACHIM
6-6148
WITTEN VICTOR H
6-4711
WITTENBERG LAYTON
6-2342
WITTWER SYLVAN H
6-3752 6-4716 6-4717
WITZIG WARREN F
6- 893 6-2771
WOESTE K
6-5658
WOLD AARON
6-5322
WOLDRINGH H H
6-5124
WOLFE R A
6- 916 6-2356
WOLFENDALE A W
6- 257
WOLFENSTEIN L
6-3099
WOLFF ARTHUR H
6-5949
WOLFF PETER A
6- 389 6- 918 6-3090
WOLFGANG RICHARD L
6-2489 6-2621 6-5356
WOLKERS G J
6-1275 6-3989
WOLLAM J S
6-3298
WOLLAN E O
6-1038 6-1548 6-2767
WOLTERINK LESTER F
6- 529
WOLTZ P J H
6-3130 6-3134 6-6204
WOMELDORPH RAYMOND C
6-1216
WONG J B
6-1708
WOOD A J
6-5050
WOOD BETTY
6-1090
WOOD D S
6-2665
WOOD E
6-4975 6-6449
WOOD G A
6-4018
WOOD GEORGE P
6- 865
WOOD J W
6-6044
WOOD JOHN L
6-4453 6-4462
WOOD W A
6-4513
WOOD WILLIAM W
6-3609 6-3802
WOODBERRY P T
6-3786
WOODBURY D T
6-4761
WOODBURY ERIC JOHN
6-1875
WOODCOCK KARL S
6-2989
WOODCOCK RICHARD F
6-2987 6-2991
WOODGATE G K
6-2175
WOODROW J
6-2654 6-3613

WOODRUFF E P
6-1489
WOODRUFF LOIS A
6-5555
WOODS M C
6- 25
WOODWARD W M
6-3081
WOOLARD LOUIS E
6-1224
WORNER H W
6-1247 6-1691
WORTHINGTON R E
6-3994
WORTHINGTON WILLIAM JACOB JR
6-1864 6-2525
WOTIZ JOHN H
6-2348
WOUTERS LOUIS F
6- 386 6- 483 6- 715
6-2498 6-2946 6-3000
6-4313 6-4919
WRIGHT AIR DEVELOPMENT CENTER
6-2424 6-2673 6-4073
WRIGHT G T
6-4588
WRIGHT H PAYLING
6-5974
WRIGHT J
6- 135
WRIGHT JAMES MALCOLM
6- 558 6- 563 6-2870
WRIGHT K A
6-3430
WRIGHT THEODORE R F
6-6237
WRIGHT W B
6-1123
WRIGHT W B JR
6-5308
WROE D
6-5125
WROUGHTON D M
6-3576 6-5390
WU C S
6-1909 6-3867 6-5702
6-5703
WU CHUNG HUA
6-5360
WU TA-YOU
6-4972 6-6098
WUCHER J
6-4797 6-5304
WUEST WALTER
6-6024
WULFF JOHN
6-3788 6-3789
WYANT DONALD G
6-1456
WYANT ROBERT A
6- 888
WYARD S J
6-4241 6-5217
WYATT JAMES L
6-6369
WYKOFF W R
6-2178
WYLIE A W
6-5069
WYMAN L L
6-1780 6-2084
WYOMING UNIV
6-3052 6-5183 6-5459

YADAV H N
6-5906
YAFFE I S
6-4010
YAFFE L
6-2217
YAFFE RUTH POWERS
6- 539 6-1119 6-1629
6-1653 6-2595 6-3516
YAGODA HERMAN
6-2722 6-3647
YAKOVLEVA E S
6-2092
YAKUTOVICH M V
6-2092
YALE UNIV
6-1114 6-1982 6-2039
6-3296 6-3341 6-3762
6-3895 6-5754 6-6111
6-6151 6-6190 6-6375
YALOW ROSALYN S
6- 68 6-2845 6-2848
YAMAGATA YUKIO
6-3059 6-6443
YAMAGUCHI YOSHIO
6- 740 6-3025 6-3026
6-3027 6-4168 6-4173
6-4532 6-4602
YAMASAKI FUMIO
6-6490
YAMASHITA HISAO
6-5946
YAMASHITA KOSUKE
6-2820
YAMASHITA SUKEAKI
6-3865
YAMAZAKI KAZUO
6-3032
YANG C N
6- 328 6- 725
YANG L M
6-2231
YANKLEY ALEXANDER
6- 19
YANKWICH PETER E
6-2863 6-3211 6-3212
6-4470 6-5299 6-5560
6-5729
YASAITIS E L
6-6439
YASAKI T
6-3373
YATES L L
6-5260 6-5283
YAVERBAUM SIDNEY
6-5249
YEAGER ERNEST
6-3798
YEAMAN M D
6- 814
YEARIAN H J
6- 876
YEKUTIELI G
6- 259 6- 308 6-1826
6-2728 6-6136
YENNIE D R
6-2797
YERGIN P F
6-4773
YESHIVA UNIV
6-1714
YETTEWICH G
6-5011
YIH C S
6- 979
YNGVE VICTOR H
6-2392
YNTEMA J L
6-6694
YOCHEM CATHERINE
6-1288
YODH G B
6-2730 6-3020 6-4216
6-4606
YOLLES S
6-1396
YORK CARL M
6-2962 6-4539 6-5411
6-6138
YOSHIDA SHIRO
6-3063 6-3082 6-4645
YOSHIMURA TETS
6-3121
YOSHIZAWA YASUKAZU
6-4202
YOST DON M
6- 554 6-2904
YOUNG DONALD F
6-5367
YOUNG EDWARD L
6-4853
YOUNG F W JR
6-1349
YOUNG G T
6- 819
YOUNG JAY A
6-3675
YOUNG L
6-1227
YOUNG MARY LOUISE
6-3304
YOUNG R A
6-2104
YOUNG RALPH C
6-6537
YOUNIS S
6-1020
YOVITS M C
6-2519
YUAN LUKE C L
6-1525 6-2390 6-2707
YUAN SHAO WEN
6-2910
YUASA KAZUNORI
6-3865
YUASA TOSIKO
6-2226 6-6195
YUK JAMES P
6-2302 6-2597
YUSTER PHILIP H
6-1427 6-4730 6-6660
YUTSIS A P
6-3750

ZABEL C W
6- 980
ZABRONSKY H
6-5768 6-6618
ZACHARIASEN W H
6-2411 6-2689 6-2902
6-4036 6-6312 6-6315
ZACK JAMES G
6-4340
ZACKAY VICTOR F
6- 202 6-4780 6-6058
ZAFFARANO D J
6- 735 6-3109 6-4803
6-4804 6-4983 6-5829
ZAIDEL A N
6-6571
ZAJAC BARBARA
6-1921
ZALESKI PIERRE
6-4155
ZALKIN ALLAN
6-6641
ZANDBERG E YA
6-3705
ZARZYCKI GEORGES
6- 541 6-3223
ZATSEPIN G T
6-2402 6-5801
ZAVON MITCHELL R
6-5949
ZEBROSKI EDWIN L
6-1130 6-3540
ZEDLER GARLAND G
6-4378
ZEIGER H J
6-2734 6-2736
ZEIGLER W T
6-2104
ZELDES H
6- 435 6- 436 6-4669
ZELDOVICH YA B
6-3427
ZEMANSKY M W
6-1280 6-3303
ZEMANY PAUL D
6-6113
ZHDANOV A P
6-3374
ZHEVAKIN S A
6-6080
ZHUKOVSKII N N
6- 421
ZIEGLER VALERY
6-2658 6-2659 6-2932
ZIEGLER W T
6- 147
ZIELER E
6-6704
ZILL LEONARD P
6- 101 6- 148 6-3787
ZILVERSCHOON C J
6-3697
ZILVERSMIT D B
6-6297 6-6302
ZIMMERMAN C
6-1567
ZIMMERMAN J B
6-3231
ZIMMERMAN WILLIAM III
6- 89
ZINN W H
6- 477 6-1583 6-3472
6-4938 6-5712 6-6221
ZIRINSKY S
6- 600 6-1238
ZIRKLE R E
6-4321
ZISMAN W A
6-3988
ZOBLE W
6-4924
ZORN G T
6-2718
ZORZY JAMES
6-5825
ZUCKER E R
6-4667
ZUNTI W
6-1007 6-1017 6-1023
6-3872
ZUPPINGER A
6-3935
ZWOLINSKI BRUNO J
6- 620 6-1637 6-6529
ZYRYANOVA L N
6- 433

# CUMULATIVE SUBJECT INDEX

The user of this subject index should bear in mind that subjects, rather than words, have been indexed. The indexer tries to select what to him seems to be the most probable and logical place to look for the information under consideration. Since it is not possible to know exactly where users of the index might look for certain items of information, numerous cross references are included to guide the user to other sources of information on related subjects. Thus, the user must decide what the indexer would consider to be the most appropriate index entries for specific items of information. This problem, however, is inherent in the preparation and use of any subject index and is not, in any sense, peculiar to the index of *Nuclear Science Abstracts*.

Generally, the direct form of subject entry is used in this index rather than inverted headings or, in some cases subheadings; e.g., Amino acids rather than Acids, amino; Helium isotopes $He^4$ rather than Helium — isotopes $He^4$ or Helium — $He^4$ isotopes. Note, however, that in some cases modifying terms are used parenthetically in preference to using a more direct type of entry which would result in the scattering of information; e.g., Sodium (liquid) rather than Liquid sodium. Organic compounds, on the contrary, are usually entered in the index in the inverted form so that substituted compounds are listed near the parent compound, e.g., Benzene, bromo- rather than Bromobenzene. In general, the style of nomenclature used is that of Chemical Abstracts except that some items listed there as subheadings are elevated to form part of the main heading, e.g., Butyric acid, ethyl esters rather than Butyric acid — ethyl esters. Salts of organic acids are indexed in a similar fashion.

Inorganic compounds are indexed in the direct form listing cations in the order of increasing valence in the case of polycationic salts of varying valence and in alphabetic order for polycationic salts in which all cations have the same valence; e.g., Sodium aluminum sulfates and Potassium sodium sulfates.

In general, any one specific item of information is entered in the index in every place where the user might probably look for it; e.g., an item on sodium–potassium alloys is entered under both Sodium–potassium alloys and Potassium–sodium alloys. A study of the effects of x radiation on hair will be found under both X radiation and Hair. Note, however, that if a dog has been used arbitrarily as the experimental animal, the information will not be found under Dogs as it is assumed that the same results would have been obtained in tests on other animals. Note also that papers are not usually entered under broad general headings; e.g., a paper on treatment of thyroid disease with $I^{131}$ will be listed under Thyroid diseases and under Iodine isotopes $I^{131}$, but not under Radiotherapy.

Main headings are listed in alphabetic order. A parenthetic qualifier following a main heading is disregarded in alphabetizing unless there is more than one so that the modifier determines the order; e.g., Sodium, Sodium (gaseous), Sodium (liquid), Sodium acetates.

Descriptive phrases (modifiers) rather than ordinary subheadings are used under the main headings to give a better indication of the material covered in an abstract than would be possible with only a word or two. Such phrases are written so that the idea considered most important is presented first if this does not result in too awkward an expression. However, in searching the index it is advisable to scan all the modifiers under a main heading in order to determine which abstracts should be consulted for the desired information. Many of the modifiers are designed to be read in inverted order or to be read with the main heading inserted at the position of the comma in order to obtain a meaningful phrase; e.g., Uranium — allotropic transformation temperatures of, effect of cooling rate on is read "effect of cooling rate on allotropic transformation temperatures of uranium." Experience in using an index of this type will be the best guide in obtaining the desired information, and a consideration of synonymous, or nearly synonymous, terms will prove valuable.

The bold face number followed by a colon is the volume number, and the numbers following are the abstract numbers. The designation (R) following an abstract number indicates that it is an abstract of a progress report; the designation (J) indicates that it is an abstract of a journal (published literature) article; and the designation (P) indicates that it is an abstract of a patent. Abstract numbers for reports other than progress reports carry no letter designations.

# CUMULATIVE SUBJECT INDEX

## A


Abdomen
  effects of shielding of, on mortality, 6:4698(R)
  radiation tolerance of rat, factors affecting, 6: 6267(J)
  radiosensitivity, 6: 4352(R)
Absorption spectra
    (See also as subheading under materials and radiation; also heading identified by name of radiation, e.g., Neutron spectra.)
  of anions, effect of complex formation on, 6: 1428
  atomic and molecular, review of methods of measurement, 6: 3727(J)
  interpretation and theory of, 6: 1302(R)
Accelerator tubes
  for 800-kv cascade generator, design, 6: 5684(J)
  for linear accelerators, d-c drain and breakdown phenomena for unoutgassed metals in, 6: 3086
  performance, factors affecting, 6: 5486(R)
Accelerators
    (See also specific accelerators.)
  electron, design, 6: 6413(R)
  focusing forces in large-radius, strengthening of, 6: 4231(J)
  glass vacuum chambers for, wall thickness of, 6: 3088(J)
  injection mechanism for, using an electrostatic field, 6: 6219(P)
  integrating circuit for ion-beam intensity measurements, 6: 5204(J)
  magnetic beam deflector for, 6: 4332(P)
  performance factors affecting, 6: 1393(R)
  radiofrequency power supply system for, 6: 3698(J)
Accelerometers
  damping of elastically supported element in vacuum tube, 6: 5635
  design, 6: 5830(R)
  piezo-electric, design, 6: 3338(R)
  vacuum tube, design, 6: 3338(R)
Acenaphthene
  luminescence of crystals and xylene solutions of, $\gamma$-irradiated, 6: 4750(J)
Acetaldehyde, dichloro-
  interactions between nuclear spins in, 6: 2172(J)
  spin echo envelope for protons in, 6: 2170(J)
Acetates
  metabolism by Propionibacterium pentosaceum, 6: 1697
  metabolism in biosynthesis of formates, 6: 2837
  metabolism in synthesis of lipids, 6: 4718
  as precursors of amino acids in casein, 6: 5967
  as precursors of milk constituents in dairy cow, tracer studies, 6: 4385
Acetic acid
  effects of radiation on, 6: 6291(R)
  electrical conductivity under high field excitation, measurement, 6: 3747
  heat of dissociation, 6: 3956
  ionization in dioxane-water solutions, 6: 1631
  isotopic exchange reactions in, 6: 1626
  reaction with diphenyldiazomethane in ethanol, kinetics and hydrogen isotope effects, 6: 5045(J)
  synthesis of $C^{14}$-carboxyl labeled, on semimicro scale, 6: 5078(J)
  synthesis of methyl-labeled, 6: 1699
Acetic acid, amino-
    (See Glycine.)
Acetic acid, bromo-
  polarographic behavior, 6: 538
Acetic acid, bromo-, ethyl ester
  polarographic behavior, 6: 1639, 1640
Acetic acid, chloro-
  polarographic behavior, 6: 807
  quadrupole spectra measurement, 6: 5351
Acetic acid, chloro-, alkyl esters
  fission of carbon-halogen bond in, by polarographic methods, 6: 3232
Acetic acid, chloro-, derivatives
  quadrupole spectra measurement, 6: 5351
Acetic acid, chloro-, ethyl ester
  polarographic behavior, 6: 807
Acetic acid, diazo-, ethyl ester
  acid-catalyzed reactions, H-isotope and solvent effects, 6: 4400
Acetic acid, dichloro-
  quadrupole spectra measurement, 6: 5351
Acetic acid, 2,4-dichlorophenoxy-
  synthesis of $C^{14}$ ring- and side-chain-labeled, 6: 4458(J)
Acetic acid, dihydroxy-
    (See Glyoxylic acid.)
Acetic acid, (ethylenediamine)tetra-
  complexing action in photometric determination of Be in Be-Cu alloys, 6: 4736(J)
  dissociation constants, 6: 3771
  effects on Pu distribution and excretion in the rat, 6: 6291(R)
  protective action of Na and Ca salts of, against radiation injuries due to deposition of fission products in bone, 6: 5951
  in separation of W from Ti, 6: 5740
  synthesis from $C^{14}$-labeled formaldehyde and ethylenediamine, 6: 2052
  toxicology and effect on excretion of Pu, 6: 496(R)
  toxicology and therapeutic uses in Pu poisoning in rats, 6: 6522
Acetic acid, (ethylenediamine)tetra- complexes
  effects on $Y^{91}$ removal from bone, 6: 5278
  with rare earths, spectrophotometry of, 6: 2889(J)
  with rare earths, stability constants and free energies of formation, 6: 4438(J)
  with uranyl and Th ions, properties, 6: 3771
Acetic acid, mercapto-
  radiosensitivity effects, 6: 3495(J)
Acetic acid, 2-methoxyphenoxy-
  as reagent in separation of Th from cerous oxalate, monazite, and U, 6: 3524(J)
Acetic acid, nitrilotri-
  dissociation constants, 6: 3771
Acetic acid, nitrilotri- complexes
  with neodymium, spectrophotometry of, 6: 2889(J)
  with uranyl and Th ions, properties, 6: 3771
Acetic acid, trichloro-
  quadrupole spectra measurement, 6: 5351
Acetic acid, trifluoro-
  acylation reactions with phenyl lithium intermediate, 6: 6300(R)
  infrared and Raman spectra of light and heavy, 6: 6560(J)
  molecular dipole moments, 6: 131(J)
Acetic acid, vinyl ester
  synthesis $C^{14}$- labeled, 6: 174(J)
Acetic anhydride
  isotopic exchange reactions in, 6: 1626
Acetoacetic acid
  biosynthesis following fatty acid oxidation in the cyclophorase-mitochondrial system of rabbit liver, 6: 6491
Acetone
  catalytic reduction, 6: 551
  metabolism in biosynthesis of formates, 6: 2837
Acetone, thenoyltrifluoro-
  extraction of uranyl ion by, 6: 2047
  properties and ultraviolet spectra, 6: 4744
  synthesis of $C^{14}$-labeled, 6: 4759
Acetone, thenoyltrifluoro- – benzene – dysprosium systems
  equilibrium constant for, 6: 5115
Acetone, thenoyltrifluoro- complexes
  of thorium in aqueous solution, ionization, 6: 1625
Acetonitrile
  fluorination with $HgF_2$, 6: 3984(J)
  as solvent in organic polarography, 6: 2598

Acetonitrile, trifluoro-
microwave spectra and molecular structure, 6: 2345(R), 3986(J)
Acetophenone
acylation with acetic anhydride, 6: 91(R)
electric conductivity of solutions of cobalt(II) nitrate in, 6: 84
Acetophenone, α, α,-diphenyl-
ultraviolet absorption spectrum, 6: 5082(J)
Acetyl chloride
isotopic exchange reactions in acetic anhydride, 6: 1626
Acetylacetone
(See 2,4-Pentanedione.)
Acetylene
alpha-particle stopping power of, relative to polystyrene, 6: 4237(J)
effects of γ radiation on, 6: 3762(R)
mass spectra of deuterated, 6: 3979(J)
molecular vibration of, and of its deuterated forms, 6: 137(J)
Acetylene, diphenyl-
scintillations in, 6: 961
Acetylene, methyl-
(See Propyne.)
Acids
(See also specific compounds; also general and specific headings for acids, e.g., Amino acids; Fatty acids; Nucleic acids.)
corrosive effects on Ni, Ni alloys, and stainless steel, 6: 1217
Acridines
selective concentration in tumor tissues as type of cancer diagnosis, 6: 3208(J)
Acrylonitriles
effects of radiation on aqueous solution of, 6: 4748(R)
ACTH
(See Adrenocorticotropic hormone.)
Actinides
(See also specific elements and Rare earths.)
chemistry, review, 6: 4405(J)
electron capture by, Sargent diagram for, 6: 5522(J)
electron configurations, 6: 5116
position in periodic system, 6: 3240(J)
theory of, review, 6: 3263(J)
Actinium
bone deposition of, radioautographic studies, 6: 3198
radiometric determination, 6: 2005(J)
tissue distribution, 6: 3198
Actinium isotopes
(Isotopes identified as AcC, etc., have been listed as in the table below.)
AcC Bismuth isotopes $Bi^{211}$
AcC' Polonium isotopes $Po^{211}$
AcC'' Thallium isotopes $Tl^{207}$
AcU Uranium isotopes $U^{235}$
Actinium isotopes $Ac^{222}$
half lives, 6: 3533(J)
Actinium isotopes $Ac^{225}$
separation from $Th^{229}$, 6: 3811
Actinium isotopes $Ac^{227}$
toxicology of equilibrium mixture of, 6: 3198
Actinium isotopes $Ac^{228}$
beta spectra, 6: 1557(J)
Actinium isotopes $Ac^{229}$
half lives, 6: 284
identification and half lives, 6: 2788(J)
Actinium isotopes $Ac^{230}$
formation and decay schemes, 6: 284
Activated sludge
(See Waste processing.)
Activation analysis
(See Radiometric analysis.)
Activity coefficients
of binary solutions of volatile liquids, determination, 6: 6374
Adenine
metabolism, effect of aminopterin on, 6: 2280
Adenosine, methylthio-
biosynthesis in yeasts, mechanism, 6: 5532
biosynethesis in yeasts and isolation of, 6: 5533
Adenosinephosphoric acids
exchange of P of, with inorganic phosphate, 6: 802
fluorimetric analysis, 6: 1134
role in transport of phosphate in human erythrocyte, 6: 4720
Adenylic acid
(See Adenosinephosphoric acids.)
Adenylpyrophosphoric acid
(See Adenosinephosphoric acids.)
Adipic acid, perfluoro-
preparation, 6: 3994(J)
Adrenal glands
effects of adrenaline on, 6: 1075
effects of removal of, on inactivation of injected histamine in the mouse, 6: 6343
effects of removal of, on plasma sulfhydryl levels in rats, 6: 2246
effects on survival of rats after x irradiation, 6: 507
response to radiation sickness, 6: 1968(J)
Adrenal hormones
effects on tumor growth, 6: 5544
Adrenaline
destruction in solution by x radiation, 6: 2557(J)
effects of radiation on, 6: 4352(R)
effects on adrenal and thyroid glands, 6: 1075
synthesis of $C^{14}$-labeled, 6: 4459(J)
Adrenochrome
synthesis of $C^{14}$-labeled, 6: 4459(J)
Adrenocorticotropic hormone
effects on fecal lysozyme titer, 6: 9
effects on gastric secretions, 6: 7
effects on plasma sulfhydryl or protein levels, 6: 2246
effects on tissue distribution and toxicity of Be, 6: 4714
radiosensitivity effects, 6: 1965(J)
stimulation of red-cell production by, 6: 3881
in treatment of radiation sickness, 6: 58(J)
Adsorbed films
of helium II, heat transport by, 6: 5118(J)
of helium II, mass flow in, 6: 5120(J)
phase transitions in, thermodynamic treatment, 6: 5119(J)
Adsorption
(See also subheadings under materials adsorbed and adsorbents.)
of dissolved substances on liquid surfaces, measurement of, 6: 176(J)
of gases on solids, theory, 6: 5349(R)
magnetochemical investigations of, 6: 4020
of particles in fluids flowing through porous materials, 6: 4486(J)
Aerial prospecting
equipment for, evaluation of, 6: 6596
Aerodynamics
(See also Air flow; Boundary layer; Fluid flow; Gas flow; Supersonic flow.)
lift and moment calculations, application of computers to, 6: 2993(R)
performance of bare-wire thermocouples in air streams, 6: 1713
Aerosol generators
design, 6: 3304(R), 3306(R)
Aerosols
(See also Dusts; Particles.)
behavior during cleaning, 6: 3266
beta-active particles in, radioautographic method of identifying, 6: 3307
collection by atomized sprays, 6: 1439
collection of water droplets in clouds and radiation fogs, 6: 4528(J)
detection and size measurement of, use of electrically heated filament for, 6: 4811(J)
dispersal in lower atmospheric layers, 6: 676(R)
dispersion, sedimentation, and behavior under various atmospheric conditions, 6: 6493(J)
filters for, testing of, 6: 3555(R)
filtration of, inertial mechanism in, 6: 517(J)
flocculation by intense high-frequency sound, 6: 862
impaction on surface and body collectors, 6: 1708
method for rapid evaluation of transient concentrations of, 6: 6511(R)
particle size measurement, 6: 3305(R)
particle size measurement by differential settling-forward angle scattering camera, 6: 4043, 4091(R)
physical behavior in atmosphere 6: 4810
polydispersity and nucleation in, 6: 809(R)
polydispersity in, differential settling apparatus for studies on, 6: 3304(R)
portable slit ultramicroscope for determining concentration in air, 6: 4347(J)
preparation, 6: 3800(R)
preparation, $H_2SO_4$ as nucleating source in, 6: 3306(R)
production in aerosol generators, 6: 3306(R)
retention in lungs, 6: 4348(J)
sampler for use on aircraft in flight, 6: 5403
sampling and analysis of, equipment for, 6: 657(R)
settling rate, photoelectric method of measuring, 6: 5797(J)
size measurement of particles in, 6: 3800(R)
thermal force on particles in, a temperature gradient, 6: 2010
ultramicroscopy of, review, 6: 4812(J)
Aggregates
(See specific materials used as aggregates; see Concrete aggregates.)
Agriculture
motion-picture film on tracer studies in, 6: 5294(J)
Air
(See also Atmosphere; Breath; Gases; Meteorology; Stack disposal; Ventilation.)

Air (cont'd)
analysis electronic method for, 6: 576(J)
analysis for fluorocarbons by infrared absorption, 6: 3614
cleaning, procedures and equipment for, 6: 3555(R)
excitation potentials, 6: 396(J)
fission products in, maximum allowable concentrations, 6: 1611
gamma-ray absorption of, comparison with tissue, 6: 5270(J)
ionization in, from $\beta$ ray point sources, 6: 763
luminosity produced by collision of shock waves in, 6: 4957(J)
multiple scattering of protons in, 6: 4235(J)
primary specific ionization in, at high energy, 6: 4832(J)
ranges of fission products in, 6: 2504
ranges of protons in, 6: 1345(J)
removal of particulate matter from, handbook on, 6: 3266
sampling, procedures and equipment for, 6: 3555(R)
spark spectra, 6: 4104(J)
thermodynamic properties of, graphs, 6: 3217
Air flow
(See also Fluid flow; Gas flow; Supersonic flow.)
atmospheric turbulence measurements at BNL, 6: 3828(R)
boundary layer displacement effect, 6: 4047
convection at high velocities and temperatures, measurement of, 6: 1717(J)
heat transfer and pressure drop for, in small tubes, 6: 4481
heat-transfer coefficients and friction factors for, in an inconel tube, 6: 866
in large rooms, scale-model studies of, 6: 873(J)
performance of bare-wire thermocouples in, 6: 1713
turbulence in, characteristics of, 6: 677(R)
Air Force Radiation Lab., Univ. of Chicago
progress reports, 6: 2557(R), 4352(R), 5550(R)
Aircraft engines
(Covering chiefly equipment and theory of engines not dependent on nuclear energy; see also Turbojet engines.)
design of nuclear turbojet, 6: 1589
heat exchangers for, 6: 865
Alabama Polytechnic Inst.
progress reports, 6: 3346(R)
Alanine
biosynthesis in A. serogenes, 6: 2581
infrared spectra in $D_2O$ solution, 6: 3982(J)
Albumins
biosynthesis of $C^{14}$-labeled, by sugar beets, 6: 6341(J)
complexing impurities in bovine serum, as affecting Be ion protein binding studies, 6: 5541(R)
effects of x radiation on kinetics of thermal denaturation of, in eggs, 6: 4369(J)
exchange between blood and lymph, 6: 25
inactivation by radiation, 6: 3895(R)
metabolism of serum, in patients with cirrhosis, 6: 3945(J)
preparation of $I^{131}$-labeled using ion exchange resins, 6: 5292
ultracentrifugal and viscosity studies, 6: 4342
Alcohols
(See also specific alcohols, e.g., Ethanol.)
effect on radiochemical oxidation of aqueous $FeSO_4$, 6: 6568(J)
ionization constants of fluorine-containing, 6: 2035(J)
oxidation by O in aqueous solution, induced by $H_2O_2$ - ferrous iron reaction, 6: 5981
Aldehydes
oxidation by mitochondria of rat tissues, 6: 5980
Aldol
synthesis of $C^{14}$-labeled, 6: 174(J)
Aldonic acids
in synthesis of glyconyl peptide, 6: 162
Algae
(See also Plankton.)
carbon dioxide metabolism in, pH effects on, 6: 531
pigments in blue-green, 6: 14
Alizarin
synthesis of $C^{14}$-labeled, 6: 2053
Alkali fluoride complexes
with $MoO_3$, energy of formation of, 6: 2306(J)
Alkali halide crystals
electric conductivity, effects of plastic deformation on, 6: 3603
F- and U-centers produced in, 6: 6311
fluorescence, $\alpha$- or $\gamma$- induced, 6: 653(R)
fluorescence, phosphorescence, energy storage, and release of stored energy by light in, 6: 1749(R)
luminescence of, subjected to ionizing radiation, 6: 4246(J)
plastic flow in, 6: 3603
sensitivity of, to x and $\gamma$ rays, 6: 5432(J)
Alkali halides
phase studies, 6: 96(J)
Alkali halides (cont'd)
reduction with $Na_2P_2O_6$, 6: 3992(J)
Alkali metal carbonyls
hydrolysis with $H_2O$, 6: 6298
preparation, 6: 6298
Alkali metal compounds
heat of reaction, 6: 94(J)
Alkali metals
(See also specific element concerned.)
analysis of mixtures of alkaline earths and, 6: 825(J)
resonance overcharge of ions in slow collision with, 6: 4526(J)
stability of negative ions, 6: 3750(J)
vibration frequency of diatomic molecules, 6: 4747(J)
Alkaline earth compounds
crystal structure, 6: 5322(R)
Alkaline earth diuranates
crystal structure, 6: 2869(J)
preparation, oxidation, and thermo dynamic properties, 6: 2869(J)
Alkaline earth metals
analysis of mixtures of alkali metals and, 6: 825(J)
Alkaline earth oxides
ionization potential or rare earth ions in activated, 6: 2333(J)
Alkaline earth sulfides
fluorescence of, $\alpha$- or $\gamma$-induced, 6: 653(R)
ionization potential of rare earth ions in activated, 6: 2333(J)
Alkanes
absorption of photons of cosmic radiation in, 6: 258(J)
Alkenoic acids
infrared spectra of some long chain, their bearing on structure of $C_{17}$-phthienoic acid, 6: 6577
Alkyl bromides
reaction with ethanolic Na ethoxide, kinetics, 6: 4424(J)
Alkyl iodides
organic yields of the $I^{127}$ (n, $\gamma$) $I^{128}$ reaction in, influence of structure phase and added $I_2$ on, 6: 1659
Allanite
radiometric analysis for Th, using nuclear emulsion techniques, 6: 4066(J)
Allis-Chalmers Mfg. Co.
progress reports, 6: 4853(R)
Allothreonine
ion exchange separation from threonine, 6: 4029(J)
synthesis of $N^{15}$- and $C^{14}$-labeled, 6: 4029(J)
Alloys
(See also Steel, Stainless steel, and alloys of individual metals, e.g., Aluminum alloys. Systems containing carbon as a major constituent are called Systems.)
bibliographies on light, 6: 904
corrosion by water, 6: 4776(R)
equation for diffusion in binary, solutions of, 6: 1244(J)
mechanical properties of light, effect of grain direction on, 6: 2668
metallographic etching of, mechanism, 6: 3790(R)
order-disorder in, theory and kinetics of, 6: 4782
superlattice stability in, 6: 2166(R)
x-ray scattering by, atomic size effect in, 6: 2210(J)
Alpha decay
energy calculation, 6: 4664(J)
Geiger-Nuttall relation for, modification of, 6: 3123(J)
of nuclides with atomic numbers less than 83, rates of, 6: 1556
of odd nuclei, classification by departure factor, 6: 6717(J)
one-body model of, 6: 6188
rates, correlation of, 6: 363
rates in the medium heavy elements, 6: 410
spins of excited states of even-even nuclei in, 6: 5194(J)
systematics of, 6: 2174(J)
theory of, wave-statistical, 6: 6200(J)
Alpha emission
internal conversion in, determination, 6: 4248
Alpha particles
(See also under specific elements and isotopes.)
absorption and intensity of primary cosmic-ray, 6: 4816(J)
angular correlations of, from photodisintegration of $C^{12}$, 6: 1861
binding energy, calculation, 6: 5666(J)
biological effects compared with x radiation, 6: 2562, 4687
biological effects on fungi, 6: 3739
chemical effects on hydrocarbons, 6: 1421(J)
chemical effects on water, 6: 143(J), 144(J)
detection and measurement, 6: 474(P)
detection by scintillation detectors, pulse-size distribution, 6: 4588(J)
detection with spark counter, 6: 5450(J)
dosage determinations in single biological cells, 6: 293
effects on alkaline phosphatase activity, 6: 28
effects on aqueous formic acid, 6: 5346

Alpha particles (cont'd)
effects on brain neoplasms, ⊙: 5287(J)
effects on crystal structure, ⊙: 4007(J)
effects on liquids, ⊙: 556
effects on organic compounds, bibliography, ⊙: 6008
effects on semiconductors, ⊙: 557(J)
electron-hole production in Ge by, ⊙: 1044(J)
emitters of, resulting from α-particle bombardment of Pb, ⊙: 411
energy distribution of, emitted in cosmic-ray stars in nuclear emulsion, ⊙: 6162(J)
energy levels in, ⊙: 3101(J)
energy loss per ion pair, ⊙: 6183(J)
from fission of $U^{235}$ and $Pu^{239}$, energy distribution of, ⊙: 698
fluorescence induced in liquids by, mechanism, ⊙: 4655(J)
fluorescence of gases excited by, ⊙: 2521(J)
fluorescence of thin films induced by, ⊙: 5909
formation of $H_2O_2$ by, effects of electrolytes on, ⊙: 5066(J)
formation of $H_2O_2$ by, in pile-irradiated aqueous B solutions, ⊙: 5067(J)
formation of $H_2O_2$ from $H_2O$ and solutions of carboxypeptidase by, ⊙: 6328(J)
genetic effects on fungi, ⊙: 1085
histological and cytological effects on skin of mice, compared with effects of local x irradiation, ⊙: 2267(J)
ionization by recoil, from $B^{10}$ (n, α) $Li^7$, ⊙: 4944
ionization damage by, effects on crystal structure and subsequent He content in minerals, ⊙: 3570(J)
ionization-energy relation in air, ⊙: 3865(J)
ionization of gases by, mechanism, ⊙: 5449(J)
ionization of noble gases by, effects of impurities on, ⊙: 6474
lethal dosage of, compared with x radiation, ⊙: 1607(J)
from $Li^6$(d, α), angular distribution, ⊙: 710(J)
from $Li^7$(p, α), angular distribution, ⊙: 711(J)
mass difference between deuterons and, ⊙: 2753
measurement of, proportional detectors for, ⊙: 959
measurement of low-energy, in nuclear emulsions by δ-ray counting, ⊙: 6420(J)
measurement of tracks of, in nuclear emulsions, ⊙: 644
mineral lattice disruption by, ⊙: 6359(J)
mitotic effects on roots, ⊙: 39(J)
monitoring of, instrument for, ⊙: 1805(J)
motion-picture film on properties of, ⊙: 5458(J)
nucleon scattering by, theory, ⊙: 3428(J)
oxidation and reduction produced by, ⊙: 146(J)
oxidation and reduction produced by in a Cr(VI) - Cr(III) system, ⊙: 2215(J)
oxidation of arsenite in aqueous solution by, ⊙: 837(J)
pair production in gases, electron volts required for, ⊙: 6512(R)
pair production in He, He + A, Ne, Ne + A, ⊙: 5639(R)
pathological effects $Ra^{224}$, case history, ⊙: 3908(J)
photodisintegration theory of, ⊙: 4958(J)
from photodisintegration of $C^{12}$, energy distribution of, ⊙: 704(J)
production of abnormal spore germination and microthallus in fungi by, ⊙: 1073
proportional counting of, effect of high β backgrounds, ⊙: 6121
from proton bombardment of $Be^9$, ⊙: 405
range-energy relation in air, ⊙: 3865(J)
range-energy relation in light elements, ⊙: 4238(J)
ranges in nuclear emulsions, ⊙: 5446(J)
from rare-earth nuclei, ⊙: 412
reduction of Ce sulfate by, in pile-irradiated B solution, ⊙: 5066(J)
response of scintillation crystals to, ⊙: 966(J)
scattering in He, ⊙: 1033(J), 2201(J)
scintillation response of organic crystals to low-energy, ⊙: 4152(J)
single-operation counter of, for plated samples, ⊙: 4145(R)
stopping power of acetylene and polystyrene for, ⊙: 4237(J)
therapeutic uses, ⊙: 3194(J)
treatment of bone and joint tuberculosis with, as peteosthor, ⊙: 6520
wire spark detector for, ⊙: 4869

Alpha sources
calibration apparatus for, ⊙: 474(P)
knock-on proton emission by, ⊙: 2785(J)
preparation and use of Po as, ⊙: 3765

Alpha spectra
(See also under specific elements and isotopes.)
conversion electrons accompanying complex, tracks in nuclear emulsions, ⊙: 5510
measurement of, cloud chamber for, ⊙: 5150(J)
nuclear emulsion study of, ⊙: 5914

Alumina
(See Aluminum oxides.)

Aluminum
absorption of cosmic electrons in, ⊙: 262(J)
absorption of cosmic photons in, ⊙: 258(J)
alkalimetric determination, ⊙: 3235(J)
analysis by pile activation, ⊙: 549(J)
annealing textures in rolled, ⊙: 1242(J)
atomic weight, ⊙: 3972(J)
bibliographies on production, fabrication, and uses of, ⊙: 904
cathodic sputtering, ⊙: 252
colorimetric analysis for B, ⊙: 1140(J)
colorimetric determination in Ti and Ti alloys, ⊙: 3523
corrosion by, $H_2O_2$, ⊙: 240(J)
corrosion by various salt, acid, and $H_2O_2$ solutions, ⊙: 2076(J)
corrosion in Norwegian heavy-water reactor, ⊙: 5101(J)
corrosion protection by phosphatization and Zn plating, ⊙: 6354(J)
creep effects on grain structure, ⊙: 4783
creep in high-purity, subgrain formation during, ⊙: 6070(J)
creep, indentation test of, ⊙: 2914, 2915
creep of grain boundaries in high purity, ⊙: 2928
crystal structure and tensile properties, effects of temperature on, ⊙: 2931
deformation mechanism, effect of temperature and strain rate on, ⊙: 4513(J)
dynamic coefficients, ⊙: 245(J)
effects of radiation on, bibliography, ⊙: 5787(J)
electric conductivity, effect of elastic deformation, ⊙: 241(J)
electric resistance and magnetoresistance at low temperatures, ⊙: 5622(J)
electron scattering by, ⊙: 1035(J)
electron single scattering by, ⊙: 5220(J)
energy levels, ⊙: 6461(R)
excitation potentials, ⊙: 396(J), 4238(J)
excitation potentials of electrons in, ⊙: 4649(J)
extinction in, ⊙: 605(J)
fatigue failures in, electron microscope studies, ⊙: 2663
fatigue properties, statistical nature of, ⊙: 4488
gamma absorption coefficients, experimental and theoretical, ⊙: 5217(J)
gamma reactions (γ,n) at 320 and 160 Mev, ⊙: 1538
gamma reactions (γ,p), ⊙: 2487(J)
gamma reactions (γ,p), energy and angular distributions, ⊙: 5486(R)
gamma scattering, spectral distribution of, ⊙: 6621(R)
gamma transmission by effect of γ spectrum on, ⊙: 6466(J)
grain structure, effects of creep on, ⊙: 4783
hardness, ⊙: 2914, 2915
heat of combustion, ⊙: 1131(J)
helium diffusion through, ⊙: 1745
infrared spectra of, calculations, ⊙: 161(J)
intensities in diffraction pattern of, effect of cold work on, ⊙: 606(J)
intergranular and interdendritic segregation of impurities in, investigation by pile irradiation, ⊙: 6370(J)
lower oxidation states, ⊙: 1125(J)
meson total cross sections, ⊙: 4593
π-meson scattering by, ⊙: 6625
$\pi^-$-meson scattering cross sections, ⊙: 319
$\pi^-$-meson total cross sections, ⊙: 2730(J)
$\pi^0$ mesons from, by photon reactions, ⊙: 317
microstructure, ⊙: 2914, 2915
momentum transfer in high-energy bombardment of, loss of $Na^{24}$ by, ⊙: 3077
multiple scattering of electrons in, ⊙: 5502(J)
neutron attenuation in mixtures of, with water, ⊙: 4612
neutron cross sections, ⊙: 1526
neutron inelastic-collision cross sections, ⊙: 5214
neutrons scattering by, ⊙: 980
neutron scattering cross sections, ⊙: 6702(J)
pair-production and Compton scattering in, ⊙: 4967(J)
photometric determination in Mg alloys, ⊙: 2016(J)
photometric determination in Zn and steel, ⊙: 1139(J)
pitting corrosion, effect of Mg and Mn alloying on, 6050(J)
plastic flow in, ⊙: 603(R), 4053
proton elastic scattering cross sections, ⊙: 3422(J), 5692(J), 6179
proton range-energy relation in, ⊙: 4649(J)
proton reactions (p,x), cross sections, ⊙: 3825
proton scattering by, ⊙: 2710, 3095(J)
range-energy relations for electrons in, ⊙: 3608(J)
ranges of α particles in, ⊙: 4238(J)
ranges of protons in, ⊙: 1345(J), 1901(J), 4641
recrystallization texture of, in drawn wire, ⊙: 1743(J)
rolling textures in, ⊙: 1245(J)
secondary-electron emission from, under $N_2$-ion bombardment, ⊙: 5486(R)
sintering, ⊙: 2924
slip bands and hardening in, during plastic deformation, ⊙: 1258(J)
slip formation in polycrystalline, ⊙: 899
solvent extraction with 8-quinolinol in, ⊙: 5981

Aluminum (cont'd)
spallation of, as function of bombarding-proton energy, 6: 3853(J)
spectrophotometric determination in presence of Mo, 6: 6601(R)
spectrophotometric determination in Th, 6: 5981
stress and fatigue in, 6: 4510(J)
stress corrosion, 6: 1219(J), 1624
structure of cold-worked, x-ray diffraction studies of, 6: 4080(J)
targets of, preparation, 6: 2759
tension and torsion of cylindrical tubes of, 6: 4053
thermal expansion of, linear, 6: 4511(J)
volatilization rate in He d-c arc spectroscopy, 6: 2607(J)
volumetric determination in Ti and Ti alloys, 6: 5740
welding with A arc, 6: 5110(J)
x-ray absorption by, 6: 3430(J)
Aluminum alloys
bibliography on, 6: 904
constitution diagrams, 6: 4511(J)
corrosion, marine, 6: 4061(J)
corrosion of surface-treated, 6: 1735
corrosion protection by phosphatization and Zn plating, 6: 6354(J)
crack formation in gas welding of, effect of composition on, 6: 6365(J)
creep and tensile properties of dilute $\alpha$ solid solutions of, 6: 1235
crystal structure and tensile properties of, effects of temperature on, 6: 2931
fatigue strength, effect of shape of cross section on, 6: 193(J)
fatigue strength, testing of, 6: 2087
fatigue strength, under biaxial tensile stresses, 6: 4067
grain refinement of, mechanism, 6: 907(J), 6068(J)
grain refinement of cast, by addition of Ti and B, 6: 1253(J)
linear thermal expansion, 6: 4511(J)
metallurgical properties of, for high temperature use, 6: 596
paper chromatographic analysis, 6: 5993(J)
plastic properties, effect of alloying elements on, 6: 231(R)
Poisson's ratio for, in the yield region, 6: 4771
polarographic analysis for Cr, 6: 1407(J)
welding by argon arc process, 6: 859(R)
welding effect of composition on crack formation during, 6: 6071(J)
Aluminum alloys (Al clad)
mechanical and corrosion tests of spot-welded, in tidewater and weather, 6: 888
Aluminum–aluminum oxide cermets
elastic and other properties, 6: 5099(J)
Aluminum borohydrides
preparation, 6: 4304(P)
Aluminum cerium silicides
preparation and crystal structure, 6: 2335(J)
Aluminum chlorides
isotopic exchange with HCl, 6: 4031
Aluminum–chromium compounds (intermetallic)
x-ray-diffraction analysis, 6: 199
Aluminum–chromium–titanium alloys
mechanical properties and transformation temperatures, 6: 5606(R)
preparation and constitution diagrams, 6: 4780
Aluminum complexes
equilibrium constants for, 6: 535
with sulfosalicylic acid, spectrophotometry of, 6: 2611(J)
Aluminum–copper alloys
aging, x-ray-diffraction study of, 6: 244(J)
annealing mechanism in, electron microscope studies, 6: 2093(J)
creep of, effects on grain structure, 6: 4783
grain-boundary diffusion in, 6: 6610(R)
lattice-spacing relations in, 6: 6075(J)
plastic properties, 6: 5388(J)
stress and fatigue in, 6: 4510(J)
Aluminum–copper compounds (intermetallic)
crystal structure, 6: 827(J)
Aluminum–copper couples
thermoelectric power, 6: 3575(J)
Aluminum–copper–magnesium alloys
aging, x-ray-diffraction study of, 6: 244(J)
constitution diagrams, 6: 243(J)
corrosion, marine, 6: 5100(J)
lattice-spacing relations in, 6: 6073(J)
Aluminum–copper single crystals
tensile properties, 6: 603(R)
Aluminum crystals
grain boundaries in creep, behavior of, 6: 5382
plastic deformation in, effect of fixed or rotating holder on, 6: 6614(J)
plastic deformation in, x-ray and micrographic study of, 6: 1255(J)
Aluminum–germanium–lithium alloys
phase studies, 6: 6366(J)
Aluminum–germanium–sodium alloys
phase studies, 6: 6366(J)
Aluminum iodides
preparation, 6: 1133(J)
Aluminum–iron alloys
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
Aluminum isotopes
mass defect, 6: 1553
Aluminum isotopes $Al^{24}$
formation and nuclear properties, 6: 1006
formation, mass, and decay, 6: 737
Aluminum isotopes $Al^{25}$
energy levels, 6: 986
Aluminum isotopes $Al^{27}$
alpha reactions ($\alpha$,p), coincidences of protons and gammas, 6: 1878(J)
binding energy of, calculation, 6: 333(J)
deuteron reactions (d,$\alpha$), 6: 2189(J)
deuteron reactions (d,$\alpha$), excited states of $Mg^{25}$ from, 6: 5193(J)
deuteron reactions (d,d') and (d,p), 6: 1006(J)
deuteron reactions (d,p), giving mixed neutron-capture states for $Al^{28}$, 6: 6165(J)
energy levels, 6: 1008(J), 3095(J)
energy levels from proton inelastic scattering, 6: 4934(J), 5456(R), 5462(J), 5495(J)
energy levels from $Si^{29}$(d,$\alpha$), 6: 5200(J)
gamma reactions ($\gamma$,n), 6: 1876(J)
gyromagnetic ratio, 6: 3059(J)
mass, 6: 1530
neutron activation cross sections, 6: 2168
nuclear magnetic moments, 6: 995(J)
nuclear magnetic resonance absorption-line broadening in metal, 6: 6445(J)
proton bombardment of, $\gamma$ rays from, 6: 440(J)
proton reactions, excitation functions to 100 Mev, 6: 6448(J)
proton reactions (p,$\alpha$), 6: 3686
proton reactions (p,$\alpha$), energy, 6: 2185(J)
proton reactions (p,$\alpha$), and energy levels of $Mg^{24}$, 6: 4934(J)
proton reactions (p,n), excitation functions for, 6: 1021(J)
proton reactions (p,3pn), excitation of $Na^{24}$ in noncapture, 6: 4951(J)
quadrupole moment of, calculated from hfs, 6: 3680(J)
Aluminum isotopes $Al^{28}$
beta and $\gamma$ emission and mass, 6: 1530
disintegration energy, 6: 2185(J)
energy levels, 6: 1008(J)
nuclear energy levels, mixture of s and d state for neutron capture, 6: 6165(J)
Aluminum lithium hydrides
reduction of $CO_2$ to HCOOH by, 6: 5043(R)
Aluminum–magnesium alloys
annealing of, effects on crystal structure, 6: 2090(J)
corrosion, marine, 6: 5100(J)
corrosion of, mechanism, 6: 248(J)
grain structure of, effects of creep on, 6: 4783
lattice-spacing relations in, 6: 6073(J), 6075(J)
pitting corrosion, 6: 6050(J)
reactions with steam, 6: 1257(J)
stress-corrosion mechanism in, 6: 1219(J)
stretcher–strain markings in, 6: 1252(J)
welding with A arc, 6: 5110(J)
Aluminum–magnesium–silicon systems
annealing mechanism in, electron microscope studies of, 6: 2093(J)
grain refinement of, effect of various additions on, 6: 250(J)
Aluminum–magnesium–zinc alloys
corrosion, marine, 6: 5100(J)
corrosion, mechanism of, 6: 248(J)
Aluminum–manganese alloys
electric resistance and magnetoresistance at low temperatures, 6: 5622(J)
pitting corrosion, 6: 6050(J)
Aluminum–manganese–titanium alloys
arc melting, weight loss during, 6: 5384(R)
constitution diagrams, 6: 4792(R), 5384(R)
phase studies, 6: 5384(R)
Aluminum–molybdenum alloys
constitution diagrams, 6: 2300
corrosion and metallurgical properties, 6: 2300
Aluminum–molybdenum compounds (intermetallic)
x-ray-diffraction analysis, 6: 199
Aluminum–molybdenum–titanium alloys
mechanical properties and transformation temperatures, 6: 5606(R)
preparation by melting and forging, 6: 4780
Aluminum–nickel alloys
crystal structure in $\beta$ phase, 6: 242(J)
Aluminum–nickel compounds (intermetallic)
x-ray-diffraction analysis, 6: 199

Aluminum oxide–beryllium oxide systems
constitution diagrams, ceramic properties, and physical properties, 6: 4775(J)
Aluminum oxide–beryllium oxide–titanium oxide systems
constitution diagrams, ceramic properties, and physical properties, 6: 4775(J)
Aluminum oxide films
preparation and electrical properties, 6: 1391
Aluminum oxide–titanium oxide systems
constitution diagrams, ceramic properties, and physical properties 6: 4775(J)
Aluminum oxide–uranium oxide systems
phase studies, 6: 3772
Aluminum oxides
analysis, fabrication, preparation, and properties of, compilation of data on, 6: 1447
ceramic containing, preparation and properties, 6: 886(P)
cryoscopy of, in cryolite-NaF eutectic, 6: 3221(J)
emanating power of, effects of radiation on, 6: 2770(J)
emanating power of, using Hahn emanation technique and x-ray measurements, 6: 2587
precipitation from homogeneous solutions, 6: 2602(J)
sintering, 6: 5097(R)
sintering, recrystallization, and vapor pressure measurements, 6: 6601(R)
thermal conductivity, 6: 204, 1448(R)
thermal conductivity, measurement of, 6: 6588(R)
thermal conductivity, measurement by ellipsoid envelope method, 6: 2918
Aluminum–silicon systems
as coating for Ti, oxidation resistance of, 6: 5608(R)
corrosion, marine, 6: 5100(J)
grain refinement of, effect of various additions on, 6: 250(J)
Aluminum–silver alloys
annealing mechanism in, electron microscope studies of, 6: 2093(J)
fatigue mechanism in, 6: 1248(J)
lattice-spacing relations in, 6: 6075(J)
x-ray-diffraction analysis, 6: 5108(R), 5109(R)
Aluminum single crystals
anisotropy of atomic scattering factor in, 6: 4541(J)
creep, tensile, and plastic properties of, 6: 2021
delay time for the initiation of slip in, 6: 1742(J)
dynamic formation of slip bands in, 6: 6368(J)
effect of rolling on crystal texture, 6: 4508(J)
plastic deformation, 6: 247(J), 618(R), 1470(R), 2380(J), 4795(R), 5386(R)
plastic deformation bands and Laue asterism, 6: 6313(J)
plastic deformation in, x-ray microscopy method of studying, 6: 1250(J)
plastic deformation mechanism, electron microscope studies of, 6: 2092(J)
recrystallization after plastic extension, 6: 3326(J)
stress-hardening dependence on orientation, 6: 4081(J)
x-ray asterisms from deformed, 6: 1254(J)
Aluminum–thorium alloys
metallography of, with polarized light, 6: 1228
Aluminum–titanium alloys
constitution diagrams, 6: 3796(J), 4788(R)
constitution diagrams and microstructure, 6: 908(J)
crystal structure, from x-ray-diffraction data, 6: 1243(J)
phase studies, 6: 5384(R)
preparation from $TiO_2$ and Al powder, 6: 607(J)
Aluminum–uranium alloys
metallography of, with polarized light, 6: 1228
Aluminum–zinc alloys
atomic structure, 6: 5107(R)
thermodynamic properties, 6: 5107(R)
Aluminum–zirconium alloys
casting and forging properties of superduraluminum containing Zr, 6: 6074(J)
constitution diagrams, 6: 591(R), 4505(R)
tensile properties, 6: 3791
Alundum
(See Aluminum oxides.)
Americium
(See also Actinides; Transuranic elements.)
absence in nature, reason for, 6: 2059(J)
bibliographies, 6: 5587
bone deposition, 6: 1389
chemical separation, 6: 468(P)
ion exchange separation, 6: 4563
radiometric determination, 6: 105
separation from Cm, 6: 2634
separation from Pu and U, 6: 105
Americium chlorides
absorption spectrum of hydrated, 6: 4444
Americium fluorides
vapor pressure and heat of sublimation, 6: 123
Americium(III) ions
absorption spectra, 6: 3258, 3418
hyperfine structure, 6: 3258
transition probabilities for, 6: 3418
Americium(V) ions
absorption spectra and hyperfine structure, 6: 3258
Americium(VI) ions
absorption spectra and hyperfine structure, 6: 3258
infrared spectra, 6: 3259
structure, 6: 3259
Americium isotopes
decay schemes, formation, and half lives by cyclotron bombardment techniques, 6: 4563
Americium isotopes $Am^{240}$
electron capture by, 6: 2946
Americium isotopes $Am^{241}$
alpha emission, measurement of, 6: 1481
alpha half life, 6: 2792(J)
alpha spectra, 6: 415, 2775
decay schemes, 6: 413, 6713(J)
gamma and x radiation accompanying decay of, 6: 4657, 4665(J), 4919
slow neutron reactions, 6: 357
Americium isotopes $Am^{242}$
formation and slow neutron fission, 6: 357
half life of metastable state, for negative $\beta$ emission, 6: 4656
Americium isotopes $Am^{243}$
formation and slow neutron fission, 6: 357
Ames Lab.
progress reports, 6: 4803(R), 5396(R)
Amherst Coll.
progress reports, 6: 1425(R)
Amines
(For derivatives see by name of substituent, e.g., Dodecylamine acetate.)
reactions of tertiary aliphatic, with hexafluorocyclobutene, 6: 2866(J)
Amino acids
acetylation by enzymes of Clostridium kluyveri, 6: 3147
biosynthesis by cows, precursors for, 6: 5967
biosynthesis by Ustilago zeae, 6: 759
biosynthesis from carbohydrate C in the mouse, 6: 2639
biosynthesis of $C^{14}$-labeled, by Rhodospirillum rubrum, 6: 6013
chromatographic determination in normal and x-irradiated egg yolks, 6: 508
determination in serum lipoproteins, 6: 4442
effects of ultraviolet radiation on, 6: 2624
infrared spectra in $D_2O$ solution, 6: 3982(J), 4743(J)
ion-exchange chromatography applied to, 6: 1989
isotopic equilibration analysis for glutamic acid, 6: 819(J)
metabolism in cirrhotic liver, 6: 2279(R)
radiosensitivity effects, 6: 2564
in synthesis of glyconyl peptides, 6: 162
uptake of glucose $C^{14}$ by, in mouse brain, 6: 72(J)
Amino acids (labeled)
separation by ion exchange resin and by starch chromatography from hydrolysates of protein, 6: 2050(J)
Aminopterin
effect on adenine and sodium formate metabolism, 6: 2280
in treatment of leukemia, 6: 2277(J)
Ammonia
biosynthesis by bacteria, 6: 71
collision diameters for interruption of 3-3 inversion lines of, 6: 3380 (R)
compressibility isotherms and thermodynamic functions of mixtures of $H_2$ and $N_2$ and, 6: 1275(J)
decomposition of, Hg-photosensitized, 6: 2858
disproportionation of deuterated, in mixtures, 6: 4416
effect of x radiation on aqueous, 6: 6327(J)
exchange of D between HD and, equilibrium in, 6: 3241
isotopic exchange with deuterium, 6: 4416
reaction with $D_2$, catalysis on metal films, 6: 5998(J)
spectra, analysis of $^1\Pi \rightarrow {}^1\Delta$ transition in NH radical, 6: 5999(J)
spectra of flames of, with fluorine, 6: 2032(J)
synthesis in $\gamma$-ray field from a $Co^{60}$ source, 6: 1431, 5353
Ammonia (liquid)
irradiation of, to determine possibility of formation of free electrons, 6: 6707
thermodynamic functions of ammoniacal species in, 6: 809
Ammonia-$d_2$
ionization potential, 6: 4739(J)

**Ammonia-$d_3$**
ionization potential, 6: 4739(J)
spectrum, analysis of $^1\Pi \rightarrow {}^1\Delta$ transition in ND radical, 6: 5999(J)
**Ammonia–cobalt chloride systems**
phase studies, 6: 2678(R)
**Ammonium acid fluorides**
corrosive effects on stainless steel and Ni alloys, 6: 4058
**Ammonium acid phosphates (labeled)**
phase transitions, 6: 2024(J)
**Ammonium bromides, tetrabutyl-**
stability in chloroethylene, 6: 2597
**Ammonium chlorides**
atomization, 6: 1439
crystal structure from neutron-diffraction study, 6: 4542(J)
**Ammonium chlorides-$d_4$**
crystal structure from neutron-diffraction patterns, 6: 4540(J)
**Ammonium chloroiodides, tetramethyl-**
stability in chloroethylene, 6: 2597
**Ammonium fluoferrates**
infrared spectrum, 6: 1667(J)
**Ammonium fluoride–sodium fluoride–water systems**
phase studies at 25°, 6: 2321
**Ammonium fluorides**
fluorination of chlorides with, 6: 133(J)
recovery from solid sludge, 6: 3459(P)
**Ammonium fluozirconates**
thermal decomposition, 6: 2296
**Ammonium iodides, tetramethyl-**
stability in chloroethylene, 6: 2302, 2597
**Ammonium iron(II) sulfates**
oxidation, irradiation induced, 6: 3156
**Ammonium manganese sulfates**
paramagnetic resonance absorption, microwave measurements of angular dependence of, 6: 2242
**Ammonium nickel sulfates**
crystalline electric field in, 6: 6639
**Ammonium sulfates**
protective action against radiation injuries of bacteriophages, 6: 4686
**Ammonium sulfites**
atomization, 6: 1439
**Ammonium vanadium sulfates**
absorption spectra, 6: 1647(J)
paramagnetic resonance absorption, microwave measurements of angular dependence of, 6: 2242
**Amoeba**
cell division following x irradiation, 6: 2557(R), 6244
diffusion and active transport of water through membrane of, 6: 2582(J)
effects of carcinogens on division rate, 6: 4352(R)
effects of nitrogen mustards on division rate, 6: 4352(R)
**Amperometric analysis**
(See Conductometric analysis.)
**Amplifiers**
(See also Electron tubes.)
coincidence type, for determining quantity of high speed particles traveling in a predetermined direction, 6: 3475(P)
design, 6: 407(R), 635(J)
handbook on, 6: 2976
minimal noise, for proportional counters and similar applications, 6: 6105
operating manual for linear type AEP 1444 (Canada), 6: 1495
overloading characteristics of type 1444 (Canada), 6: 1802(R)
performance of wide-band electrometer, 6: 2981(J)
pulse type, performance data for, 6: 1278(R)
for scintillation spectrometry, design, 6: 5833(R)
for testing scintillation counters, 6: 5440(J)
**Analyzers**
(See Computors; Oscillographs; Pulse analyzers; Spectrometers.)
**Anemia**
ferrokinetic abnormalities in, studied by $Fe^{59}$ turnover, 6: 2810
induced by diversion of erythrocytes into the lymph by x rays, 6: 1599
induced by Ra, 6: 787
pernicious, therapy with vitamin $B_{12}$, 6: 3736
postirradiation, causative factors, 6: 3497(J)
postirradiation, pathogenesis of, 6: 1598
sickle cell, Na and K levels of erythrocytes in, 6: 1388
**Anemometers**
(See also Meteorological instruments.)
hot-wire, calibration of, 6: 4052(J)
**Animal care**
(Caging, sanitation, ventilation, feed, disease control, etc.; see also subheadings under specific animals; see also Metabolism cages.)
criteria for design and air conditioning of rodent quarters, 6: 1373
**Animal cells**
alpha dosimetry in single, with scintillation counters, 6: 293
**Animal cells (cont'd)**
division, changes in mitotic spindle during, 6: 5
effects of malignancy on, 6: 65(J)
effects of radiation on, 6: 771(J), 6500(J)
effects of radiation on, chemical modification of, 6: 49
effects of radiation on, review, 6: 4359(J)
effects of radiation on, theory, 6: 3740(J)
effects of x radiation and colchicine on, 6: 36
effects of x radiation on respiration in, 6: 763, 1079, 1084
histological and histochemical effects of radiation on, 6: 2252
metabolism of, effects of x radiation and cysteine on, 6: 3487
metabolism of, studies in tissue culture, 6: 797(J)
nucleic acid metabolism in, effects of x radiation on, 6: 3168(J)
radioinduced changes in, 6: 3491(J)
radiosensitivity of, in spleen, 6: 5259
respiration of, radiation effects on, 6: 3486
sensitive volume, determination by irradiation and ionization density, 6: 2261(J)
survival of irradiated rabbit thymocytes, effects of cysteine and hypoxia on, 6: 2563
thymonucleic acids in, photometric determination, 6: 3493(J)
**Animal reproduction**
(See also Litter sizes.)
effects of whole-body exposure to x-rays on, in male rabbits, 6: 4706(J)
**Animal respiration**
(See also as subheading under specific tissues and organisms.)
instrument for continuously recording and analyzing $CO_2$ and O concentrations in respired air, 6: 4689(R)
**Animals**
(See also specific animals.)
radiation effects on, summary, 6: 3489
**Anion exchanging compounds**
adsorptive properties of, theory, 6: 1687
**Anion exchanging materials**
catalytic effect on methanolysis of triglycerides, 6: 5979
**Anions**
absorption spectra, effect of complex formation on, 6: 1428
catalytic effects on metal reduction reactions, 6: 1992
**Anoxia**
effects on irradiated rats, 6: 3490
effects on radiation damage in mice, 6: 45
effects on survival of irradiated rabbit thymocytes, 6: 2563
protection against radiation damage in mouse embryos by, 6: 1078
protection against radiation injuries by, 6: 6277(J)
**Anthers**
phosphatase activity, 6: 3
**Anthracene**
efficiency of scintillation detector with, for high-energy $\gamma$ rays, 6: 2720(J)
luminescence of crystals and xylene solutions, $\gamma$-irradiated, 6: 4750(J)
nuclear magnetic resonance absorption in, 6: 4625(J)
in polystyrene, internal absorption of fluorescent light in, 6: 5647(J)
purification, 6: 533
scintillation-response dependence on x-ray wave length, 6: 3637(J)
secondary electrons produced by $\gamma$ rays in, energy, 6: 5456(R)
specific fluorescence of, exciton theory, 6: 306(J)
**Anthracene crystals**
electrons produced by $\gamma$ irradiation in, energy, 6: 6187(J)
in neutron flux and spectrum measurements, 6: 4589(J)
preparation and properties, 6: 533
response to charge particles, 6: 966(J)
response to $\mu$ mesons, 6: 3010(J)
scintillation efficiency of, effect of pressure on, 6: 826
**Anthracene, diphenyl-**
scintillations in, 6: 961
**Anthragallol**
synthesis of $C^{14}$ labeled, 6: 3293(R)
**Anthranilic acid**
bromination with oxidative ring closure, 6: 6015
in maize, as an agent causing blue fluorescence, 6: 774(J)
**Antibiotic therapy**
biometric analysis of data on, in radiation injuries, 6: 2567
**Antibiotics**
(See also specific antibiotics.)
in therapy of radiation sickness, 6: 784
in therapy of radioinduced bacteremia, 6: 1384
**Antibodies**
formation, effects of radiation on, 6: 1595, 2251
formation, effects of x rays on, 6: 1375, 5257
formation in mice, effects of $Co^{60}$ $\gamma$ radiation on, 6: 6246(J)
formation in universal serologic reaction, 6: 6496(R)
half-life on homologous gamma globulin in humans, beef, dogs, monkeys, rabbits, guinea pigs, and mice, 6: 4386
localization of, prepared from rat aorta, 6: 1113

Antibodies (cont'd)
measurement of quantity and quality by $I^{131}$ antigen precipitation, 6: 4381
preparation from rat aorta, 6: 1113
Antigens
formation in universal serologic reactions, 6: 6496(R)
presence of complement in, 6: 4341
Antihistaminic drugs
(See also specific drugs.)
in treatment of radiation sickness, 6: 3919(J)
Antimony
gamma absorption cross sections, 6: 1326
gamma cross sections, 6: 364
oxidation-reduction reactions in solution, mechanism of, 6: 6529
Antimony isotopes $Sb^{121}$
gamma reactions ($\gamma$,n), 6: 1871(J)
nuclear magnetic resonance lines in $SbFe_6$ ion, 6: 6684(J)
Antimony isotopes $Sb^{122}$
beta spectra, 6: 1304(R)
isomeric transition, 6: 409
Antimony isotopes $Sb^{123}$
gamma reactions ($\gamma$,n), 6: 1871(J)
Antimony isotopes $Sb^{124}$
beta-gamma angular correlation in, 6: 1913(J)
beta-gamma polarization correlation in decay of, 6: 3840(J)
beta spectrum, 6: 3667(J)
double $\beta$ decay, energy available for, 6: 4255(J)
forbidden $\beta$ spectra, 6: 1914(J)
forbidden transitions in, 6: 3667(J)
gamma radiation accompanying decay of, 6: 4209(J)
Antimony isotopes $Sb^{125}$
yield and half lives of, from $U^{233}$ and $U^{235}$ fission, 6: 1857
Antimony–silver couples
grain-boundary diffusion in, tracer study, 6: 6602
Apatites
analysis for calcite, 6: 1452
preparation of $P^{32}$-labeled macrocrystalline fluor-, 6: 6583(J)
Applied Fisheries Lab., Univ. of Wash.
progress reports, 6: 5933(R), 5934(R)
Archeological specimens
age estimation, by radiocarbon analysis, 6: 755(J), 3483(J), 4882(J), 5695
age estimation with $C^{14}$, use of gas-filled proportional counter for, 6: 6418(J)
Argentina (Chubut Province)
geology, 6: 215(J)
Arginine
biosynthesis by yeasts, 6: 794
Argon
adsorption on C, 6: 1425(R)
adsorption on irradiated and nonirradiated graphite, 6: 6186
collection and purification of natural and volcanic, for isotopic abundance studies, 6: 5142(J)
collision probability for slow electrons in, 6: 1490
diffusion coefficients in, 6: 4565(J)
drying by passing through K-Na alloy trap, 6: 5335
dynamic characteristics of the plasma in discharge through, 6: 6096(J)
electron and positron scattering in, 6: 401(J)
excitation potentials and range of $\alpha$ particles in, 6: 4238(J)
fluorescence excited by $\alpha$ particles in, 6: 2521(J)
ion pair production in, by $\alpha$ particles from Po, 6: 2974(R)
ionization by $\alpha$ particles, 6: 5639(R)
ionization by electrons, 6: 1263(J)
luminosity produced by collision of shock waves in, 6: 4957(J)
melting point of adsorbed layers, 6: 5119(J)
migration velocity of electrons in, 6: 4885(J)
multiple scattering of $\beta^+$ particles in, 6: 1899(J)
multiple scattering of protons in, 6: 4235(J)
neutron scattering cross sections, 6: 679
origin of atmospheric, 6: 4779(J)
ranges of fission products in, 6: 2504
thermal conductivity at low pressure, 6: 6591(J)
thermodynamic properties at zero pressures, 6: 3803
thermodynamic properties of adsorbed, on titanium dioxide, 6: 154(J)
Argon isotopes
occurrence in natural gases, 6: 4779(J)
Argon isotopes $A^{36}$
mass, 6: 991(J)
Argon isotopes $A^{37}$
electron capture in, average charge produced by, 6: 5507
electron capture in, $\gamma$ emission resulting from, 6: 6190
energy levels, from (p,n) reactions on $Cl^{37}$, 6: 4633(J)
neutrino recoils following orbital capture in, 6: 4273(J)
Argon isotopes $A^{37}$ (cont'd)
nuclear recoils from decay of, 6: 1909
Argon isotopes $A^{38}$
excited states as compound nucleus, 6: 2755(J)
mass, 6: 991(J)
neutron cross sections, 6: 4621
Argon isotopes $A^{39}$
half life, 6: 1924(J), 4621
identification and half life, 6: 4669(J)
mass, calculated from $\beta$ decay and mass of $K^{39}$, 6: 6151
Argon isotopes $A^{40}$
deuteron reactions (d,p), 6: 1870(J)
neutron cross sections, 6: 4621
photoprotons from, energy distribution of, 6: 1861
production by $K^{40}$ decay in earth's mantle and crust, 6: 5373(J)
Argon isotopes $A^{41}$
formation by reaction $A^{40}$ (d,p), 6: 1870(J)
neutron cross sections, 6: 4621
properties of energy states of, 6: 1859
Argon isotopes $A^{42}$
formation, half life, and neutron cross sections, 6: 4621
Argonne graphite reactor
kinetics, transfer function, 6: 5874(J)
reactivity measurement, 6: 1527
Argonne heavy water reactor
calibration, 6: 4220
design drawing, 6: 4938
Argonne National Lab.
progress reports, 6: 1506(R), 4688(R), 4776(R)
progress reports on biological and medical research, 6: 500(R), 2555(R)
progress reports on instrument research and development, 6: 2974(R), 5639(R)
Arizona (Apache Co.)
northeastern, geologic map of Carrizo Mountain Area, 6: 5779
Arkansas Univ.
progress reports, 6: 2311
Armour Research Foundation
progress reports, 6: 604(R), 3291(R), 4505(R), 4785(R), 4786(R), 4792(R), 5379(R), 5383(R), 5384(R), 5606(R)
progress reports on Ti–Al–Cr and Ti–Al–Mo alloys, 6: 4788(R)
progress reports on Zr-base alloys, 6: 591(R)
Aromatic compounds
formation of negative free radicals of, 6: 6528
infrared spectra, 6: 5760
intermolecular H bonding between substituent groups and ring hydrogens, 6: 5760
orientation by nitro group in, effect of solvent on, 6: 4394
Arsenate ion
noninterference in volumetric determination of U using Jones reductor, 6: 6305
Arsenic
determination in biological materials by radioactivation, 6: 3756
determination in sea water by radioactivation, 6: 3755
determination of sub-$\mu$g quantities by radioactivation, 6: 3754
gamma reactions, relative yields, 6: 5486(R)
nuclear magnetic resonance, 6: 2747(J)
Arsenic isotopes $As^{71}$
half life, 6: 2702(J)
Arsenic isotopes $As^{75}$
magnetic resonances and nuclear magnetic moments, 6: 345(J)
mass, 6: 3054
nuclear magnetic moments, 6: 1850(J), 2747(J), 5467(J)
Arsenic isotopes $As^{76}$
gamma emission, 6: 741(J)
tissue distribution, 6: 1614(J)
in treatment of Hodgkin's disease and fungoid mycosis, 6: 1614(J)
Arsenic isotopes $As^{77}$
gamma emission accompanying $Ge^{77}$ $\beta$ decay, 6: 3440(J)
Arsenic oxides
nuclear quadrupole resonance Zeeman effects in, 6: 5467(J)
volumetric determination, 6: 3233(J)
Arsenite ion
oxidation by $\alpha$ and x rays in aqueous solution, 6: 837(J)
Ascorbic acid
comparative effects of $Co^{60}$ $\gamma$ rays and 3-Mev cathode rays, 6: 3889(R)
decrease following total-body x irradiation, 6: 1956(J)
exchange of H and D in, 6: 6316(J)
inactivation of enzymes by, 6: 1590
infrared spectrum of deuterated, 6: 6316(J)
oxidation, effect of thyroxine and derivatives on, 6: 80, 803
radiosensitivity effects, 6: 520(R)
radiosensitivity effects in combination with cysteine, 6: 3495(J)

Astatine
effects on thyroid gland, 6: 2809
uptake by thyroid gland, 6: 496(R)
Astrophysics
ionization of gas mixtures in stellar interiors, 6: 3591
isotopic abundances in universe, 6: 1754
nova production by $He^3$-$He^3$ reaction, 6: 3308(J), 3309(J)
nuclear energy sources in stars, 6: 3310(J)
transition probabilities for $C_2$ and $N_2^+$, 6: 256
Atherosclerosis
amino acid composition of serum lipoproteins involved in the development of, 6: 4442
chemical prophylaxis, by heparin, 6: 19(J)
pathology and chemical prophylaxis, 6: 496(R)
Atmosphere
(See also Air; Meteorology; Stack disposal.)
balance of ions in, 6: 439(J)
chloride particles in, detection, 6: 2603(J)
continuous particulate radiation monitoring, design of instrument for, 6: 6127(J)
control of metallurgical and mineral dusts and fumes in Los Angeles County, Calif., 6: 3737
diffusion in, from a point source, 6: 979
eddy conduction of heat in, 6: 3827(R)
electric potential measurement of, effect of wind on accuracy of radioactive collector in, 6: 2417(J)
inert, liquid Na pump for purification of, 6: 4074
ionization balance of, determination, 6: 6416(J)
ions and radioactivity in, distribution, 6: 3125(J)
natural radioactivity in, measurement, 6: 6711
oxygen isotope ratio in, origin of, 6: 2953(J)
particles in, physical behavior, 6: 4810
radioactivity in, concentration of, 6: 429(J)
radioactivity in, following atomic bomb explosion, 6: 3443(J)
radioactivity in, measurement, 6: 4264(J), 5438(J)
radioactivity in, natural and from atomic explosions, 6: 5919(J)
radioactivity in, near Paris, France following Nevada atomic bomb explosion, 6: 5707(J)
temperature fluctuations of, under different meteorological conditions, 6: 1520(R)
turbulence and diffusion of particulate matter in, 6: 676(R), 1516(R), 1517(R), 1519(R)
turbulence and diffusion of particulate matter in lower layers of, measurements and instrumentation, 6: 6673(R)
turbulence and particle distribution in, measurement of, 6: 1518(R)
turbulence in, 6: 677(R), 3041(R)
turbulent flow, photographic study of, 6: 3827(R)
velocities in, frequency distributions of, 6: 331(J)
vorticity, correspondence between actual and geostrophic, 6: 4912
Atomic beams
focusing by magnetic field, theory and apparatus for, 6: 1335(J)
Atomic constants
tables, 6: 5123(J)
Atomic energy
(See also Atomic weapons; Nuclear power.)
bibliographies from captured German documents, 6: 4186
chemical aspects of, lectures on, 6: 833(J)
Atomic Energy Commission
administrative reports, 6: 491
corporate author entries used in cataloging reports by Technical Information Service, AEC, 6: 3481
organization and function, 6: 1069(J)
reactor program, lecture on, 6: 1318
research programs in physical sciences, 6: 2552
research programs in physics, 6: 1487
sale of U-contaminated steel scrap, 6: 5954(J)
semiannual reports, 6: 2243(J)
Atomic Energy Project (Canada)
progress reports, 6: 1802(R)
progress reports on electronics, 6: 2977(R)
Atomic Energy Project, Univ. of Rochester
progress reports, 6: 509(R), 2279(R), 4695(R), 5541(R)
Atomic Energy Project, Western Reserve Univ.
progress reports, 6: 1379(R), 2559(R), 3888(R), 4357(R), 4694(R)
Atomic Energy Research Establishment, Harwell, Berks (England)
atomic central heating plant at, 6: 1068(J)
research program, buildings, and facilities at, 6: 2244(J), 5248
safety handbooks used at, 6: 514
Atomic explosions
(See also sites of explosions; Explosions; Radiological warfare.)
atmospheric radioactivity following, 6: 3443(J)
azimuth and elevation determination of, instrument for, 6: 1572(P)
biological, sociological and psychological effects at Hiroshima and Nagasaki, 6: 5719(J)
burns caused by, mass treatment of, 6: 3186(J)
Atomic explosions (cont'd)
dating by atmospheric radioactivity from, 6: 5919(J)
dominant chlorophyll mutant in wheat induced by exposure of seed to radiation during, 6: 6265(J)
effects of radiations from, on seed, 6: 32
examination and salvaging of food supplies following, methods for, 6: 6489(J)
fall-out from, 6: 1(R)
healing of scars of persons receiving burns or other injuries during, a survey four years after, 6: 6257(J)
lethal effects, 6: 1587(J), 1588(J)
medical aspects, 6: 3150(J), 3151(J), 3152(J), 3880(J)
meteorological effects, 6: 5707(J)
radioactive deposits from, at Ottawa, Canada, 6: 3714(J)
relation of atmospheric radioactivity to, 6: 429(J)
Atomic masses
report of ACS committee on, 1952, 6: 3972(J)
from titanium through Zn, from mass-spectroscopic measurements, 6: 3838(J)
Atomic power
(See Nuclear power.)
Atomic structure
(See also as subheading under specific elements.)
energy levels in, electrodynamic displacement of, 6: 3140(J)
energy levels of elements from Yb to U, 6: 3449(J)
Hartree model, pair-production cross section calculated by using, 6: 5687(J)
waves functions for the p shell, 6: 1364(J)
Atomic weapons
(See also Radiological defense; Radiological warfare.)
simulation of effects of, devices for, 6: 6236(J)
Atoms
angular momentum distribution in Thomas-Fermi model of, 6: 4933(J)
binding energy of Thomas-Fermi, 6: 5621(J)
collisions with electrons, theory of, 6: 2765(J), 3429(J)
collisions with gaseous ions, 6: 4847(J)
electronic clouds of, periods of oscillation by virial theorem, 6: 3733(J)
energy levels, double resonance method for investigating, 6: 3876(J)
fast-electron interactions in heavy, 6: 3606(J)
hydrogen-like, mass corrections to fine structure of, 6: 5526(J)
self-consistent fields for, 6: 2186(R)
ATP (Adenosine triphosphate)
(See Adenylpyrophosphoric acid.)
Auger electrons
yields of K, bibliographies, 6: 5912
Aureomycin
physiological effects of small doses, 6: 4690(R)
radiosensitivity effects on dogs, 6: 516(R)
treatment of radiation injuries with, alone and in combination with blood transfusions, 6: 5273(J)
Aurintricarboxylic acid
in treatment of Be poisoning, 6: 1615, 1616
Autoradiography
(See Radioautography.)
Auxins
effects of γ radiation on, in Tradescantia, 6: 5936
Axial flow compressors
matrix and relaxation solutions for determining subsonic through flow in, 6: 5360
Azides
radiosensitivity effects, 6: 51(J)
toxicity for catalase enzyme systems and for intact animals and radiosensitivity of tumors and intact animals, 6: 6262(J)
Azo dyes, metal derivatives
stability constants, measurement of, 6: 6533
Azure A
antispasmodic effects on ileum and uterus, 6: 4343


## B


Babcock and Wilcox Co.
progress reports, 6: 3556(R), 3557(R), 4493(R)
progress reports on heat transfer and corrosion by liquid Li, 6: 4044(R)
Bacteremia
post-irradiation, duration in mice, 6: 5548
radioinduced, 6: 5545
radioinduced, antibiotic therapy of, 6: 1384
radioinduced, factors affecting onset of, 6: 5715
radioinduced, role of intestinal flora in, 6: 5547
Bacteria
(See also by species.)
bibliographies, 6: 5537
biosynthesis of alanine and glutamate in, 6: 2581
biosynthesis of lactate in, 6: 3951(J)

Bacteria (cont'd)
biosynthesis of purines in A. aerogenes, tracer studies, 6: 5530
chemical protection against radiation injuries, mechanisms of, 6: 5280(J)
cytology and ecology of, review, 6: 5537
cytology of, bibliography on, 6: 5536
effects of chemotherapeutic agents on, tracer studies review, 6: 3943(J)
effects of $P^{32}$ $\beta$ particles on viability of, 6: 1603(J)
effects of radiation on, 6: 3889(R)
effects of radiation on, chemical modification of, 6: 47
effects of radiation on genetic changes in, 6: 1086
effects of radiation on oxygen uptake, 6: 4359(J)
effects of radiation on spores, 6: 3895(R)
effects of x radiation on, bibliography, 6: 1377
ethanol formation in, routes of, 6: 5969
formation of formic hydrogenylase by, effects of x-radiation on, 6: 29
gamma radiation dosage needed for sterilization of solutions contaminated with, 6: 5935
glucose fermentation by, 6: 165
glucose fermentation by, mechanism, 6: 5930
identification in intestine of mouse, 6: 5545
lethal mutations of multinucleate, by ionizing radiation, 6: 6499(J)
metabolism of, as affecting oxidation of sewage, 6: 1597
metabolism of, studied in acetylation of amino acids by enzymes of Clostridium Kluyveri, 6: 3147
metabolism of, studied by ethanol synthesis in Pseudomonas lindneri, 6: 1619(J)
metabolism of, studied in Lactobacillus casei purine anabolism, 6: 1112
metabolism of, studied in an oxidative cycle in the propionic acid bacteria, 6: 1697
metabolism of purine ribotides by L. casei, 6: 5531
mutants produced by x irradiation of, 6: 6258(J)
nitrogen fixation by, 6: 71
ribonucleic acids determination in, 6: 762
sensitization by $\beta$ radiation to effects of temperature and repeated irradiations, 6: 6504(J)
staining of nucleic acids and chromosomes of, 6: 5536
sterilization by electron irradiation of cotton seed infected by, 6: 2815(J)
sulfur and P loss from, 6: 3955(J)
toxins of C. septicum, effects of radiation on susceptibility to, 6: 6240
Bacteria (labeled)
preparation of spores of B. subtilis labeled with $P^{32}$, 6: 6296(J)
Bacterial slimes
adsorption and assimilation of $P^{32}$ by, 6: 789(R)
Bacteriophages
inactivation by x rays, 6: 3895(R)
radiation effects on, 6: 4686
radiation effects on, physical factors affecting, 6: 4685
radiation effects on, thermal factors affecting, 6: 4684
Balances
ambient temperature and humidity effects on the performance of micro-, 6: 4122
Bald Rock Mine (North Carolina)
pegmatite minerals of rare earth type in, 6: 4496
Barite
adsorption of lauric acid on, 6: 5368(R)
Barium
bibliographies, 6: 3957
determination in presence of Ca and Sr by flame photometry, 6: 3752
K-auger electron yields, 6: 5912
metabolism in Drosophila larvae, 6: 1982
neutron capture cross sections, 6: 5657(R)
spectrographic determination in organic solids, 6: 158
uptake and distribution in Drosophila, 6: 503, 1595
Barium carbonates
neutron diffraction analysis, 6: 1548
Barium chlorides
ionization, 6: 541(J)
Barium complexes
dissociation in aqueous solutions, 6: 564(J)
Barium compounds
chelation with $\beta$-diketones, 6: 1634
Barium fluorides
chemical reactions producing HF, thermodynamic equilibria in, 6: 6557
Barium isotopes
nuclear reactions, 6: 3110(J)
radioactivities in, 6: 3110(J)
spectra, isotope shift in, 6: 3400(J)
Barium isotopes $Ba^{130}$
energy levels, 6: 5518(J)
Barium isotopes $Ba^{133}$
isomeric magnetic dipole transitions in, 6: 335
Barium isotopes $Ba^{134}$
gamma cascades in, following $\beta$ decay of $Cs^{134}$, 6: 689(J)
Barium isotopes $Ba^{134}$ (cont'd)
nuclear spin, 6: 698(J)
Barium isotopes $Ba^{136}$
mass, 6: 3054
Barium isotopes $Ba^{137}$
electron emission from, measured by solenoid spectrometer, 6: 3182(R)
internal conversion in, 6: 1919(J)
Barium isotopes $Ba^{138}$
gamma and x-ray emission of, accompanying $La^{138}$ decay, 6: 1916(J)
Barium isotopes $Ba^{139}$
beta and $\gamma$ spectra, measurement of, 6: 3119(J)
Barium isotopes $Ba^{140}$
preparation of carrier-free, 6: 1422
separation of $La^{140}$ from, 6: 5753(J)
yields of, from proton and neutron fission of U, 6: 3845
yields of, from proton-induced fission of U, 6: 1856, 3406
Barium titanate single crystals
dielectric properties, 6: 207(J)
Barium uranyl carbonates
preparation and properties, 6: 5087(J)
Barium zirconates
dielectric properties, 6: 2075(J)
Barley
seedlings, diurnal changes in labeled-phosphate content of leaves, 6: 5164(J)
Bartol Research Foundation, Franklin Inst.
progress reports, 6: 3387(R)
Battelle Memorial Inst.
progress reports, 6: 1736(R), 3289(R)
progress reports on Ti alloys, 6: 5783(R)
Bayleyite
occurrence in Utah, 6: 5778
Bearings
(See also Journal bearings.)
corrosion of, and corrosion inhibitors for, 6: 1218
design and lubrication, 6: 182
Bee Tree No. 1 Mine (North Carolina)
pegmatite minerals of rare earjh type in, 6: 4496
Behavior
(See also as subheading under specific animals.)
effects of radiation on maternal behavior and maze performance of rats, 6: 5551
Benemid
radiosensitivity effects on chickens, 6: 520(R)
Benzacridines
synthesis of $C^{14}$-labeled, 6: 2901(J)
Benzanthracene
chemical properties, effects of radiation on, 6: 1170(J)
Benzanthracene (labeled)
synthesis and structure determination, 6: 175(J)
Benzene
chemical effects of $\alpha$ particles on, 6: 1421(J)
deuteration and disproportionation, 6: 2615(J)
effects of neutrons and $\gamma$ rays on aqueous, 6: 2045(J)
electron distribution in, effects of $F^{19}$ nuclear magnetic shielding and substituents on, 6: 6564(J)
fluorescence of, $\alpha$- or $\gamma$-induced, 6: 653(R)
mass spectra of deuterated, 6: 3979(J)
molecular vibrations of normal and deuterated, 6: 137(J)
radiation chemistry of normal and deuterated, 6: 3531
self-diffusion coefficients, 6: 3977(J)
solubility of metallic nitrate hydrates in, 6: 83
solvent extraction of Ge(IV) by, 6: 6531(R)
synthesis of $C^{14}$-labeled, 6: 4464(J)
Benzene (labeled)
effects of radiation on benzene-$d_6$, 6: 1676
Benzene, chloro-
effects of x radiation on aqueous, 6: 2046(J)
fluorination products, 6: 3994(J)
isotope-dilution study of isomer distribution in nitration, 6: 5298(R)
Benzene, 1,4-dibromo-2-nitro
orientation by nitro group in, effect of solvent on, 6: 4394
Benzene, o-dichloro-
fluorination products, 6: 3994(J)
Benzene, 1,4-dichloro-2-nitro
orientation by nitro group in, effect of solvent on, 6: 4394
Benzene, dimethyl-
(See Xylene.)
Benzene, (1,2-epoxyethyl)-
reaction mechanisms, 6: 1390
Benzene, iodo-
isotope-dilution study of isomer distribution in nitration, 6: 5298(R)

**Benzene, iodoso-**
reaction mechanism of, with iodoxybenzene and AgOH, 6: 4032(J)
**Benzene, iodoxy-**
reaction mechanism of, with iodosobenzene and AgOH, 6: 4032(J)
**Benzene, methyl-**
(See Toluene.)
**Benzenephosphonic acid, p-ethyl-, dimethyl ester**
synthesis, 6: 851
**Benzimidazole, 2-(o-hydroxyphenyl)-**
bromination with oxidative ring closure, 6: 6015
synthesis for use as reagent for determination of Hg, 6: 5315
**Benzimidazoles, 1-glycosyl-**
synthesis, 6: 1178(J)
**Benzisoxazoles**
synthesis by oxidative ring closure with Br, 6: 6015
**Benzoic acid**
ionization constants, 6: 2594
polarographic behavior, 6: 806
as reagent in determination of Zr, 6: 113(J)
**Benzoic acid, p-benzenesulfonyloxy-**
preparation, 6: 92
**Benzoic acid, p-chloro-, mercury salt**
effects on mice, 6: 763
**Benzoic acid, iodo-**
ionization constants, 6: 2594
polarographic behavior, 6: 806
**Benzoic acids, iodoxy-**
ionization constants, 6: 2594
**Benzophenones**
carbon isotope effects in reaction with 2,4-dinitrophenylhydrazine, 6: 3964(J)
**Benzothiazoles**
chelation, 6: 6582
synthesis of 2-(o-hydroxyphenyl)-benzothiazole, 6: 6581
**Benzothiazolines**
chelation, 6: 6582
synthesis of 2-(o-hydroxyphenyl)-benzothiazoline, 6: 6581
**Benzoxazole, 2-(o-hydroxyphenyl)-**
as reagent for gravimetric determination of Cd, 6: 1654
**Benzoxazoles**
chelation, 6: 6582
**BEPO (British experimental pile operations.)**
design, 6: 5248
heat exchanger for utilization of waste heat from, design study, 6: 5007(J)
thermal neutron density, 6: 2180(J)
**Beryl**
gravimetric analysis for Be, 6: 5319(J)
**Beryllia**
(See Beryllium oxides.)
**Beryllium**
abundance in primary cosmic radiation, 6: 5132(J)
alpha reactions ($\alpha$,n), 6: 1537
analysis for Be and $Be_2C$, 6: 4078(J)
angular correlation in excited P-states of, 6: 6659(J)
bibliography on properties, purification and fabrication, 6: 3784
cathodic sputtering, 6: 252
chemical and spectrographic analysis, 6: 1657
determination in Be metal, 6: 4078(J)
deuteron and proton reactions, angular distribution measurements, 6: 3075
deuteron reactions (d,p) and (d,n), 6: 1892(J)
disintegration induced by 330-Mev protons, physical analysis of, 6: 6453
effects on plant growth, 6: 3200(J)
electron scattering by, 6: 1036(J)
energies of outer electrons in excited P-states of, 6: 6659(J)
extrusion, forging, welding, and tensile properties, 6: 224
fluorimetric determination of, traces of, 6: 543
gamma reactions ($\gamma$,n) at 320 and 160 Mev, 6: 1538
gamma reactions ($\gamma$,p), 6: 2487(J)
gamma reactions ($\gamma,\pi$), $\pi^-/\pi^+$ ratio, 6: 5452(R)
granulomatosis caused by, 6: 3940(J)
gravimetric determination in beryl, 6: 5319(J)
histological and histochemical effects of, in vivo, 6: 2836(J)
interaction of electron configurations, 6: 3750(J)
kidney pathology caused by, 6: 2835(J)
lattice constant, compressibility, cohesive energy, and work function of, quantum-mechanical calculation, 6: 5612(J)
mesic atoms formed by $\pi$- mesons and, x-ray emission of, 6: 5650
meson total cross sections, 6: 4593
$\pi$ mesons produced by $\gamma$ reactions in, $\pi^-/\pi^+$ ratio, 6: 4902(J)
$\pi^0$ mesons from, by photon reactions, 6: 317
metallography of, with polarized light, 6: 1228
**Beryllium (cont'd)**
mitotic effects of, inhibition by Mg, 6: 5034(J)
neutron cross sections, 6: 1526
neutron cross sections (n,2n), 6: 2751
neutron scattering cross sections, 6: 493(J)
neutron total cross sections, 6: 1017(J), 1023(J)
penetrating showers produced in, by cosmic radiation, 6: 265(J)
photometric determination in Be-Cu alloys, 6: 4736(J)
photon attenuation cross sections, 6: 2200
photon reactions ($\gamma,\pi$), ratio of positive to negative mesons in, 6: 4596
pretreatment prior to coating, 6: 3461(P)
production by metallothermic reduction of $BeF_2$, 6: 1988
proton fission, 6: 6625
proton reactions (p,n), 6: 1535, 1887, 3084(J)
proton reactions (p,n), angular distribution of neutrons from, 6: 2758(J)
proton reactions (p,n), neutron energy distribution from, 6: 2484, 4618
proton reactions (p,$\pi$), cross sections, 6: 3825
as a reactor moderator, 6: 1315
separation from oxide by vacuum reduction, 6: 2081
spectrographic analysis of air samples containing, 6: 6511(R)
spectrographic determination in air dusts, 6: 3757
tissue distribution and retention effects of ACTH on, 6: 4714
toxicity case studies of 9 patients exposed to atmospheric, 6: 1978(J)
toxicology of, review of research on, 6: 1109(J)
uses in reactors, 6: 5787(J)
volatilization rate, in He d-c arc spectroscopy, 6: 2607(J)
**Beryllium carbides**
determination in Be metal, 6: 4078(J)
**Beryllium chelates**
with 2,4-pentanedione, infrared and Raman spectra, 6: 2882(J)
**Beryllium chlorides**
reactions with $H_2S$, phenol, $CHCl_3$, and $CHBr_3$, 6: 3749(J)
**Beryllium complexes**
with bromomercurates, structure and stability, 6: 4401(J)
with chloromercurates, structure and stability, 6: 4401(J), 4402(J)
with citrate, ion exchange studies of, 6: 3518
equilibrium constants, 6: 535
with iodomercurates, structure and stability, 6: 4401(J), 4402(J), 4403(J)
magnetic properties of $Be[Ni(CN)_4]\cdot 2H_2O$, 6: 4013(J)
**Beryllium compounds**
granulomatosis caused by, 6: 3940(J)
pulmonary and cutaneous diseases caused by, 6: 3938(J)
synthesis of organic, 6: 3749(J)
with tropolone and tropolone-derivative, formation constants, 6: 6534
**Beryllium–copper alloys**
effects of radiation on hardness and resistivity, bibliography, 6: 5787(J)
photometric analysis for Be, 6: 4736(J)
**Beryllium crystals**
parameters, 6: 3605(J)
**Beryllium fluoride–sodium fluoride systems**
phase studies, 6: 3527(J)
**Beryllium fluorides**
metallothermic reduction of, for production of Be, 6: 1988
thermal properties in ideal gaseous state, 6: 6553
**Beryllium ion beams**
nuclear emulsion studies of, in synchrocyclotron, 6: 6691(J)
**Beryllium isotopes**
energy levels, $\alpha$-particle models for, 6: 691(J)
**Beryllium isotopes $Be^7$**
formation by proton bombardment of $C^{12}$, 6: 376(J)
neutrino emission from, nuclear recoil following, 6: 2470
neutron reactions (n,p), 6: 1859
nuclear recoils from decay of, 6: 1909
recoil momenta in decay of, 6: 349(J)
in uranium fission products, search for, 6: 358
**Beryllium isotopes $Be^8$**
alpha spectra, 6: 493(J)
calibration of nuclear emulsions using electron-positron pairs from, 6: 1807(J)
energy levels, 6: 699, 709(J), 1880(J), 2191(J), 2488(J), 3685
energy levels in, from $Be^9$(d,t), 6: 2469
energy levels in, from Li(p,n), 6: 3079(J)
energy levels in, from $O^{16}(\gamma,4\alpha)$, 6: 6163(J)
excited states, 6: 2192(J)
**Beryllium isotopes $Be^9$**
alpha reactions ($\alpha$,n), 6: 3684(R)
alpha reactions ($\alpha$,n), energy levels in $C^{12}$ from, 6: 2474(J)
alpha reactions ($\alpha$,p), ($\alpha$,d), and ($\alpha,\alpha'$), 6: 1010(J)
decay schemes of excited, 6: 3080(J)
deuteron reactions, 6: 1880(J)
deuteron reactions, magnetic analysis of charged particles from, 6: 2469

Beryllium isotopes $Be^9$ (cont'd)
deuteron reactions (d,n), angular distribution of neutrons from, 6: 5230, 5671
deuteron reactions (d,n), energy levels of $B^{10}$ formed, 6: 5473
deuteron reactions (d,p), angular distribution, 6: 5456(R)
deuteron reactions (d,p), angular distribution and excitation function, 6: 5203(J)
deuteron reactions (d,p), angular distribution of long-range protons from, 6: 5678(J), 5679(J)
deuteron reactions (d,p), energy levels of $Be^{10}$ formed in, 6: 5473
deuteron reactions (d,p), Q value, 6: 4955(J)
deuteron reactions (d,p) and (d,t), angular distribution, 6: 5661
deuteron reactions (d,t), 6: 375(J), 1859, 2489(J)
disintegration by positron-electron (K) annihilation, 6: 2490(J)
energy levels, 6: 2488(J)
energy levels from proton inelastic scattering, 6: 5495(J)
gamma reactions (γ,n), yield and energy of neutrons from, 6: 1829
gamma reactions (γ,p), betatron-determined thresholds for, 6: 6457(J)
meson reactions ($\pi^-$,2n) and ($\pi^-$,3n), 6: 3374(J)
$\pi^0$-mesons from, by proton reactions, 6: 670
neutron emission from 2.4-Mev level, 6: 6192(J)
proton reactions (p,α), 6: 405, 1016(J)
proton reactions (p,αγ), 6: 2496(J)
proton reactions (p,d), 6: 1016(J), 1334(J)
proton reactions (p,γ), 6: 405
proton reactions (p,n), 6: 1859, 3688
proton scattering by loosely bound neutron in, 6: 4242(J)
resonant energies for radiative capture of protons by, in energy range below 520 kev, 6: 6423(J)
Beryllium isotopes $Be^{10}$
beta spectra, 6: 3867
energy levels of, from $Be^9$(d,p), 6: 5473
mass calculated from Q value of $Be^9$(d,p)$Be^{10}$, 6: 4955(J)
nuclear spin and energy levels of, from Be(d,p), 6: 1892(J)
Beryllium nitrides
preparation, melting point, and crystal structure, 6: 3566(J)
Beryllium oxide–aluminum oxide systems
constitution diagrams, ceramic properties, and physical properties, 6: 4775(J)
Beryllium oxide–aluminum oxide–titanium oxide systems
constitution diagrams, ceramic properties, and physical properties, 6: 4775(J)
Beryllium oxide crystals
growing methods for, 6: 6640
Beryllium oxide powders
crystal structure, 6: 1726(J)
Beryllium oxide–titanium oxide systems
constitution diagrams, ceramic properties, and physical properties, 6: 4775(J)
Beryllium oxides
cryoscopy of, in cryolite-NaF eutectic, 6: 3221(J)
reaction with $CS_2$, 6: 3749(J)
thermal conductivity, measurement, 6: 6588(R)
thermal conductivity, measurement by ellipsoid envelope method, 6: 2918
vacuum reduction, 6: 2081
Beryllium poisoning
(See also subheadings dealing with biological effects under Beryllium.)
control of, review of industrial hygiene methods for, 6: 788(J)
therapy with aurintricarboxylic acid, 6: 1615, 1616
therapy with Na salicylate, 6: 2376, 4691(R)
therapy with sulfosalicylic acid, 6: 4693(R)
therapy with various dyestuffs, 6: 526(R)
Beryllium single crystals
mechanical properties and plastic deformation, 6: 229(R)
as neutron monochromators, 6: 5427
Beryllium sulfates
reduction, 6: 3749(J)
toxicology, 6: 4696(R)
Beryllium–thorium compounds (intermetallic)
x-ray-diffraction analysis and crystal structure, 6: 1729
Beryllium–uranium alloys
phase studies and constitution diagrams, 6: 5104
Beryllium–uranium compounds (intermetallic)
identification, 6: 5104
neutron and x-ray-diffraction analysis and crystal structure, 6: 1729
Beryllium uranyl carbonates
preparation, failure of, 6: 5087(J)
Beta decay
(See also appropriate subheadings under elements and isotopes.)
angular correlation of radiation accompanying, theory, 6: 688(J)
average charge on daughter atoms after, 6: 5696
of $Bi^{210}$ and $Tm^{170}$, theory, 6: 1356(J)
Beta decay (cont'd)
configuration forbiddenness in, 6: 5521(J)
continuous γ radiation accompanying, contribution of nuclear radiation to, 6: 6715(J)
disintegration energies of, for elements 76–98, 6: 5522(J)
double, angular correlation functions for, 6: 2784(J)
double, theory of and search for, 6: 2779
double, in $Sn^{124}$ and $Zr^{96}$, 6: 5913
effect of a finite nucleus on, 6: 6682(J)
emission of light positive particles in, 6: 5916(J)
energy, 6: 6531(R)
energy, effect of nucleon pairing and magic numbers on, 6: 6677(J)
Fermi functions for allowed, calculation and tabulation, 6: 2216
forbidden, evaluation of $F_n/F_0$ using tables of Fermi function, 6: 5702(J)
half lives for, method for measuring, 6: 5646(J)
inner bremsstrahlung in, theory, 6: 3666
interaction responsible for, 6: 5233(J)
interpretation of image transitions in theory of, 6: 4274(J)
ionization accompanying, theory, 6: 3248(R)
light positive particles in cloud-chamber studies of, 6: 6201(J)
matrix elements, 6: 431(J), 738(J)
matrix elements for first-forbidden, 6: 3438(J)
mesonic correction to, 6: 3121(J)
of mirror nuclei, coupling constants for, 6: 4254(J)
nuclear matrix elements in, theory, 6: 4988(J)
positive particles in, 6: 2226(J)
prediction of β-stable even-mass-number nuclei in, 6: 6437(J)
pseudoscalar interaction in theory of, 6: 6199(J)
relation to nuclear structure, theory, 6: 4187(J), 4188(J)
shell model prediction in, 6: 3105
spin and parity changes in, from nuclear shell model, 6: 4922(J)
systematics, 6: 2174(J)
tables of data on, 6: 433(J)
theorem involving binding energies in relation to, 6: 1558(J)
theory of, 6: 408, 740(J), 1909, 5790
theory of, as mixture of vector and tensor interactions, 6: 6194(J)
theory of, interaction in, 6: 366(J), 1941(J)
theory of, monographs, 6: 1554
theory of, very long lifetime of $C^{14}$ as difficulty in, 6: 6191
Beta particles
(From nuclear processes; including negatrons, etc.; see also subheading beta reactions under specific elements and isotopes; see also Electrons; Positrons.)
absolute counting with internal G-M tubes, 6: 5166(J)
absorption curves for theoretical, 6: 732(R)
backscattering, 6: 2510(J)
backscattering, measurement, 6: 4373(R)
biological and therapeutic effects of, from a Burnam tube, 6: 3165(J)
biological effects on viability of E. coli, 6: 1603(J)
blackening of photographic plates by, 6: 1287
bremsstrahlung from, intensity distribution of, 6: 4241(J)
Cherenkov radiation induced in water by, 6: 5509
depth dose rate determination in tissue equivalent plastic phantoms, 6: 2427
detection, portable instruments for, 6: 313(J)
detection and measurement, 6: 650(R), 960(R)
detection and measurement, design of Mark V model I Beta-Contamination Monitor, NRDL, 6: 5431
detection and measurement, review of instruments for, 6: 6129(J)
detection of coincidences of, 6: 2146(J)
detection of low activities with liquid scintillation counter, 6: 5845(J)
detection of low-energy with internal counter, 6: 5160(J)
detection of soft, proportional counter for, 6: 309(J)
determination of relative intensity of positive and negative, 6: 475(P)
dosage determination in gonads of $P^{32}$-labeled Drosophila, 6: 5937
dosage determination in presence of γ radiation, 6: 6421(J)
dosage determination with photoemulsions, 6: 964(J)
effects on biochemical oxidation of domestic sewage, 6: 1597
effects on bone marrow of rats, 6: 5260
effects on liquids, 6: 556
effects on organic compounds, bibliography, 6: 6008
effects on physiological conduction impulse in a single nerve fiber, 6: 5946(J)
effects on skin, 6: 4702(J)
end-point energies of, by adsorption in Al, 6: 3608(J)
energy changes of, in a cloud chamber, 6: 723(J)
fragmentation of chromosomes by, during mitosis, 6: 2250
genetic effects on adult male Drosophila, 6: 5939
interactions of $P^{32}$, with matter, 6: 5491(J)
Joshi effect of, 6: 3710(J)
mitotic effects on grasshopper neuroblasts, 6: 2249
motion-picture film on properties of, 6: 5458(J)
multiple scattering of + and −, in A, 6: 1899(J)

Beta particles (cont'd)
pathological effects on skin of pigs, 6: 4703(J)
protection against, by lead glass fabric, 6: 1961(J)
scattering, following passage through matter, 6: 1348(J)
scattering in air, 6: 1628
self-absorption in $P^{32}$, 6: 2209(J)
self-absorption of low-energy, from $S^{35}$ and $Ca^{45}$, 6: 3097(J)
self-scattering and self-absorption in NaCl, $Pb(NO_3)_2$ and $TlNO_3$, 6: 1344
sensitization of bacteria by, to effects of temperature and repeated irradiation, 6: 6504(J)
thickness measurements with, 6: 5093(J)
transmission through G-M counter windows, measurement, 6: 5162(J)
Beta sources
(See also Electron sources.)
absolute measurement with 4π Geiger counter, 6: 3823(J)
availability and radiographic applications, 6: 4772(J)
energy of $Sr^{90}$–$Y^{90}$ source, 6: 6718(J)
palladium$^{109}$ as multicurie, 6: 6477
preparation of $Tl^{204}$, for use as static eliminators, 6: 2890
for treatment of corneal lesions of dogs, design of $Sr^{90}$ plaques as, 6: 6284(J)
Beta spectra
(See also appropriate subheadings under specific elements and isotopes.)
determination by nuclear emulsions, 6: 1560(J)
effects of coulomb field on, tables, 6: 433(J)
Fermi distribution for, recoil corrections to, 6: 1920(J)
methods of measurement, 6: 2715(J)
nuclear spin change effects, 6: 6682(J)
probabilities of K capture or positron emission at cut-off field values, 6: 6682(J)
shape at low-energy end, theory, 6: 3722(J)
tables for analysis of, 6: 6405(J)
Beta spectrometers
auxilaries for, 6: 4579(R)
beta-beta coincidence measurements with, 6: 2146(J)
correction of magnetic lenses used in, 6: 281(J)
design, 6: 444(R)
design and performance, 6: 422(J), 954(R)
double focusing, design and operation of, 6: 3356
electric control system for, 6: 5135
focusing in, with tilted sources, 6: 2540
magnetic prism for, construction and testing of, 6: 4124(J)
operation of semicircular type, 6: 995(J)
ring-image type, 6: 5141(J)
in study of γ-rays associated with selected neutron-induced radioactivities, 6: 1907
with symmetry plane, double focusing, and air-core magnets, design, 6: 3824(J)
thin-magnetic-lens, electron optics and techniques involved in, 6: 3119(J)
at Vanderbilt Univ., design, 6: 3619
at Vanderbilt Univ., design and operation for Auger yields, 6: 5912
at Zeeman Lab., Amsterdam, design, 6: 1371
Betatrons
air-cored coil system for, design, 6: 2500(J)
clinical uses of x-ray beam from, in cancer therapy, 6: 1974(J)
instrumentation for, 6: 680(R)
monitor and x-ray yield integrator for, 6: 1799
radiographic techniques for, 6: 3277
spectra of, experimental determination, 6: 1808(J)
technique for producing γ-n and γ-p activities with, 6: 279(J)
Bevatron
design, 6: 1481
radiofrequency systems, 6: 4960
Bibliographies
(See also as subheading under specific subjects.)
on americium, 6: 5587
on analysis for $CO_2$, $H_2$, and $O_2$, 6: 110
on analytical nuclear chemistry, 6: 5742(J)
on atomic and molecular spectroscopy, 6: 5921(J)
on bacteria, structure, and functioning of, 6: 5537
on bacterial cytology, 6: 5536
on biological effects of radiation, 6: 5549, 6500(J)
on bone marrow injections in therapy of radiation injuries, 6: 6278(J)
on cosmic-ray nuclear interactions, 6: 5806(J)
on cyclotron instrumentation and operation, 6: 5889(J)
on deuterium compounds, properties, 6: 4417, 5325, 5326, 6552
on effects of α, β, γ, and x radiation on organic compounds, 6: 6008
on effects of radiation on solids, 6: 5694
on electrolyte secretion in the pancreas, 6: 3884
on electromagnetic separation of stable isotopes, 6: 5823(J)
Bibliographies (cont'd)
on fluorine and fluoride ion determination, 6: 6555(R)
on geochemistry of radioactive elements, 6: 5780(J)
on geologic time measurement, 6: 4062
on graphite, 6: 6322
on hafnium carbide, hafnium oxide, and hafnium silicate, 6: 5095
on industrial uses of radioisotopes, 6: 4859
on isotope masses and abundances, 6: 5820(J)
on light nuclei energy levels, 6: 5869(J)
on linear accelerator design, 6: 5893(J)
on low temperature phenomena, 6: 5795(J)
on metallurgy progress, 6: 5787(J)
on nuclear moments, 6: 5870(J)
on nuclear properties of isotopes, 6: 5185
on nuclear science in engineering education, 6: 6346
on nuclear structure, 6: 5868(J)
on radioisotopes in biochemical and medical research, 6: 5728(J)
on radioisotopes in mineral dressing research, 6: 5613
on radioisotopes in soils research and plant nutrition, 6: 5726(J)
on silicon carbides, 6: 4774
on slurry mechanical characteristics, 6: 5367
on solid hydroxides, 6: 4397
on stable isotope separation by chemical methods, 6: 5821(J)
on stable isotopes in biochemistry, 6: 5727(J)
on sterilization in food and pharmaceutical fields by ionizing radiations, 6: 2253(R)
on synchrocyclotrons, 6: 5890(J)
on synchrotron design, 6: 5891(J)
on synchrotron design and operation, 6: 5892(J)
on synthesis of labeled compounds with emphasis on $C^{14}$-labeled, 6: 5978(J)
on tensile strength of liquids, 6: 4041
on thorium oxides, 6: 5297
on titanium and titanium alloy properties, 6: 5387
on tracer studies of chemical systems, 6: 5763(J)
on x ray beams produced by electrons, 6: 5892(J)
Bi-crystals
(See also specific bi-crystals by name of material, e.g., Iron-silicon bi-crystals.)
grain-boundary diffusion, 6: 5108(R)
Bikini Atoll
radioactivity in biological materials from, 6: 5933(R)
radiobiological survey, 6: 5934(R)
Bile acids
chromatographic separation and identification, 6: 4441
Bile duct
carcinoma of, radiotherapy with $I^{131}$-labeled tetraiodophenolphthalein, 6: 4378(J)
Biochemistry
application of stable isotopes in, bibliography, 6: 5727(J)
Biological materials
colorimetric determination of Ge in, 6: 5739
Biological systems
effects of radiation on, interpretation of data, 6: 4707(J)
effects of radiation on, theory of, 6: 2573(J)
indirect action of ionizing radiations on, survey, 6: 4708(J)
isotopic effects of $C^{14}$ on, 6: 1387
Biophysics
effects of quantum theory on, 6: 18(J)
Biphenyl
scintillations in, 6: 961
Bismuth
absorption spectra in HCl, 6: 4735(J)
electrical conductivity and volume changes on fusion, 6: 5394(J)
electrolytic separation and determination, 6: 1138(J)
fission produced by $C^{13}$ ions in, 6: 5876
gamma scattering by, 6: 5899(J)
metallography of, with polarized light, 6: 1228
neutron inelastic-collision cross sections, 6: 5214
neutron scattering by, 6: 980
neutron scattering cross sections, 6: 3674, 5657(R)
photofission, 6: 1860
photoneutrons from, angular distribution of, 6: 1861
proton elastic scattering cross sections of, 6: 3422(J)
solubility in $BiCl_3$ and other chlorides, 6: 1999(J)
spectrophotometric determination, 6: 4724(R)
spot test for, 6: 4734(J)
tissue distribution in rats, 6: 496(R)
volatilization rate in He d-c arc spectroscopy, 6: 2607(J)
x rays of, in $Pb^{210}$ decay, 6: 4657
Bismuth (liquid)
corrosive effects on Co, 6: 5801
corrosive effects on metals and alloys, 6: 900
corrosive effects on refractory materials, 6: 6351

Bismuth (liquid) (cont'd)
dynamic corrosion and mass transfer of graphite by, 6: 6321
solubility of steel and stainless steel in, 6: 5602
wetting by, 6: 5601
Bismuth–cadmium alloys
phase studies, 6: 1469(R)
Bismuth–gallium–lead–tin alloys
preparation, 6: 4309(P)
Bismuth isotopes
alpha disintegration energies, 6: 5522(J)
Bismuth isotopes $Bi^{203}$
alpha emission from, 6: 416
identification by nuclear emulsion techniques, 6: 5914
Bismuth isotopes $Bi^{207}$
gamma emission of, accompanying K-capture decay, 6: 1915(J)
Bismuth isotopes $Bi^{209}$
deuteron reactions (d,p), binding energy of last neutron in, 6: 5456(R)
mass determination, 6: 1283
neutron reactions, 6: 3045(J)
Bismuth isotopes $Bi^{210}$
adsorption by aquadag-coated dipping G-M tube, 6: 2893(J)
beta decay, 6: 3106, 3667(J)
beta spectra of, theory, 6: 408, 1356(J), 1909
blackening of photographic plates by $\beta$ particles from, 6: 1287
bremsstrahlung emission in $\beta$ decay, energy and angular correlation, 6: 6709
bremsstrahlung from, angular correlation and intensity of, 6: 1047
decay schemes, 6: 3248(R)
electron spectra, 6: 954(R)
energy levels, 6: 2229(J)
evaporation and deposition on a Cu disk, 6: 1501(J)
forbidden transitions in, 6: 3667(J)
gamma emission from, search for 80-kev, 6: 2468(R)
half life, 6: 2534(J)
isomeric states, 6: 414
positive particles near a source of, 6: 1049(J)
as radiochemical indicator for free radicals, 6: 3548(J)
spectra, 6: 1304(R)
spectrum of L x rays accompanying RaD decay, and possible Auger transitions, 6: 4666(J)
Bismuth isotopes $Bi^{211}$
alpha decay of, $\gamma$ emission and conversion electrons accompanying, 6: 2787(J)
alpha emission and nuclear radii, 6: 4276(J)
formation, half lives, and alpha emission, 6: 411
gamma emission, conversion coefficient of, 6: 5520(J)
Bismuth isotopes $Bi^{212}$
alpha decay of, accompanying internal conversion of $Tl^{208}$, 6: 4267(J)
alpha emission from, 6: 438(J)
conversion electrons of, accompanying $\beta$ decay of $Pb^{212}$, 6: 4267(J)
gamma emission by, 6: 2714(J)
internal conversion lines, 6: 995(J)
momenta of F, I, and A electron lines of, measurement, 6: 2715(J)
preparation of carrier-free, from Th emanation, 6: 4258(J)
tissue distribution and excretion, 6: 6513(J)
Bismuth isotopes $Bi^{214}$
beta decay, 6: 4124(J)
gamma emission intensities, 6: 4278(J)
internal conversion coefficients, 6: 6484(J)
radiations of, light particles in, 6: 2780(J)
Bismuth–lead alloys (liquid)
corrosive effects, 6: 1723
heat conductivity, variation with temperature and magnetic field, 6: 5362(J)
solubility of steel and stainless steel in, 6: 5602
thermal expansion, 6: 1723
Bismuth–lead eutectic
corrosive effects on metals and alloys, 6: 901
heat-transfer characteristics under forced convection, 6: 1712
heat transfer to, in turbulent pipe flow, 6: 2066(R)
heat transfer to molten, in turbulent pipe flow, 6: 1200(R)
Bismuth–lead–thallium–tin alloys
preparation, 6: 4308(P)
Bismuth single crystals
growth from melt, effect of thermal factors on, 6: 5786(J)
Bismuth–uranium alloys
preparation for x-ray studies, 6: 4074
x-ray diffraction analysis, 6: 4074
Bitter Creek Group (Colorado)
uraniferous clays in, occurrence and analysis of, 6: 1458
Blood
analysis for As by radioactivation, 6: 3756
analysis for polyglucose, 6: 1652
Blood (cont'd)
bilobed lymphocytes in, occurrence in cyclotron personnel, 6: 5011
chemical analysis for P, 6: 5988
dialysis of, as related to survival after lethal doses of x radiation, 6: 1378
effects of radiation on, 6: 4352(R)
effects of radiation on, as affected by partial shielding and splenectomy, 6: 2562(R)
effects of radiation on clotting mechanism and chemical values in burros, 6: 5940(R)
films of, mechanical aid for making, 6: 2554
flow of, design of electrical flowmeter for recording, 6: 2984(J)
iron content, 6: 6525(J)
lithium content, 6: 16(J), 17(J)
rheology, review, 6: 5008(J)
Blood cells
(See also Erythrocytes; Leukocytes.)
protection against radiation injuries by bone marrow injections, 6: 763
shape changes, review, 6: 5008(J)
universal serologic reaction in health, in disease, and following irradiation, 6: 6496(R)
uptake of $P^{32}$ by, effect of insulin on, 6: 790
Blood circulation
(See also Circulatory diseases.)
electromagnetic determination of, apparatus and technique for, 6: 3885(J)
hypotension in, radiation effects on, 6: 4693(R)
measurement using $Na^{24}$ and $P^{32}$, 6: 5974(J)
tracer techniques in study of, 6: 3743
Blood coagulation
(See also Hemorrhage.)
causative factors, effects of radiation on, 6: 2818(J)
chemical factors affecting, 6: 1964
effects of internal radiation from $Au^{198}$ on, as measured by prothrombin consumption test, 6: 6250(J)
effects of plasma antihemophilic activity following total body irradiation on, 6: 6245(J)
effects of toluidine blue on coagulation of fibrinogen by thrombin, 6: 6492
mechanism, review, 6: 5008(J)
by spleen irradiation, 6: 2821(J)
Blood diseases
(See also Anemia; Hemolysis; Leukemia.)
bone marrow injections in treatment of, a review, 6: 6278(J)
clinical and biochemical studies, case histories, 6: 3734
metabolism of leukocytes in leukemia, 6: 4344
Blood picture
effects of acute and chronic radiation exposures on leukocyte count compared with normal count, 6: 3184(J)
effects of radiation on, 6: 1599
Blood plasma
alkaline phosphatase level of, effect of aurintricarboxylic acid on, 6: 1616
effects of radiation and surgical trauma on sulfhydryl levels in, 6: 1593
effects of total body x-irradiation and surgical trauma on polysaccharide and sulfhydryl levels in, 6: 1594
effects of total body x irradiation on plasmin inhibitor titer, 6: 2561
effects of x radiation on, in chicks, 6: 4692(R)
exchange of K of, with K of body tissues in rats, 6: 1110
ferritin determination in, 6: 1600
incorporation of glycine into fibrin, globulin, and albumin fractions of, 6: 4691(R)
index of, by $I^{131}$ for assessing thyroid activity, 6: 3946(J)
potassium exchange rate in rabbit, 6: 1111
protective action of dog, against radiation injuries to mice, 6: 2564
separation of protein bound iodine from iodide in, 6: 4697(R)
sulfhydryl and protein levels of, effect of ACTH and cortisone on, 6: 2246
synthesis by liver and non-hepatic tissues, 6: 5541(R)
volume in heart, measurement, 6: 5254
volume of thoracic, measurement, 6: 5253
Blood plasma substitutes
(See also specific substitutes, e.g., Dextran.)
fate of polyvinylpyrrolidone used as, 6: 2284
polyglucose, in shock treatment, 6: 1652
preparation, 6: 163
tissue distribution, 6: 1115
toxicology of tapioca dextrin, 6: 1617
Blood pressure
radioinduced hypotension of, effects of L-norepinephrine bitartrate monohydrate and blood transfusion on, 6: 3484
Blood serum
complement in, 6: 4341

Blood serum (cont'd)
effects of radiation on Fe concentration of, 6: 4363(J)
iodine in, after large doses of $I^{131}$, 6: 5944(J)
polysaccharide level in neoplastic diseases, effects of N mustard and radiation on, 6: 6506(J)
Blood transfusions
effects on tumors, 6: 65(J)
protective effects of, against radiation injuries, 6: 3888(R)
radiosensitivity effects on dogs, 6: 516(R)
in therapy of radiation injuries, 6: 6516(J)
in therapy of radiation injuries, and in combination with aureomycin, 6: 5273(J)
Blood vessels
(See also Capillaries.)
release of a vasotropic substance by, after whole-body irradiation, 6: 6255(J)
vasodepression by ferritin following irradiation, 6: 1600
Blood volume
measurement in organs of rats, 6: 765
measurement of total and red cell volume by injected $P^{32}$-labeled red-blood cells, 6: 5973(J)
measurement with $K^{42}$-labeled erythrocytes, 6: 2851(J)
in normal total body, selected organs, and tumors of mice, comparison with red cell volume, plasma volume, and hematocrits, 6: 1985(J)
in swine, determined by the $P^{32}$-labeled red blood cell method, 6: 6: 2291(J)
Blue Jay Mine (Colorado)
uranothorite in, occurrence and identification of, 6: 1453
Body fluids
(See also Blood; Body water; Bromide space; Chloride space; Lymph; Inulin space; Sodium space.)
radiometric analysis, 6: 1116
volumetric determination, 6: 529
Body water
alterations in, following acute whole-body irradiation, 6: 2292(J)
determination of total, with tritium, 6: 3942(J)
determination with $T_2O$, in healthy and diseased persons, 6: 3157
spectrophotometric analysis for $H_2$ and $D_2$, 6: 5830(R)
Boilers
steam, design using clean hot radioactive air that has cooled a reactor, 6: 2064
Boiling
effects of film, on heat transfer, 6: 3267
effects on heat transfer, 6: 1443
heat transfer, 6: 871(J)
heat transfer in forced-convection films, 6: 6590
rate of in liquids under free convection, 6: 872(J)
temperature distribution in high-pressure, 6: 3273(J)
Bolometers
(See also Thermometry.)
for reactor neutron flux measurements, design, 6: 2713
response of, when subjected to modulated radiation, 6: 1787(J)
Bonding
(See also appropriate subheadings under specific materials and fabricated units; see also Diffusion; Welding.)
ultrasonic inspection of, between concentric metal cylinders, 6: 4478
Bonds
(See also as subheading under specific compounds.)
hydrogen isotope effect on, in crystals, 6: 550(J)
Bone diseases
therapy with $Ra^{224}$, case history, 6: 3908(J)
therapy of tuberculosis of bone, with peteosthor, 6: 6520(J)
Bone marrow
cytological study after administration of protective agents and subsequent x radiation, 6: 6277(J)
deposition of energy of fast neutrons in, effects of bone on, 6: 5426
effects of injection of homologous and heterologous, on survival in mice following x irradiation, 6: 2562
effects of large single doses of $P^{32}$ on, of rats, 6: 5260
normal metabolic activity of, and effects of sodium pentobarbital on activity in, 6: 2568
protective effect of shielded ectopic, against radiation, 6: 3894
radiosensitivity effects of injections of, 6: 57(J), 763, 4689(R)
regeneration following irradiation in rats, negative effects of cortisone on, 6: 6279(J)
regeneration following whole-body irradiation, thyroidectomy effect on, 6: 5013(J)
therapeutic use of transplants in radiation injuries, 6: 4709
therapy of Bechterew's disease with peteosthor, 6: 6519(J)
in therapy of blood dyscrasias, review, 6: 6278(J)
uroporphyrin as natural constituent of normal rabbit, 6: 4722
Bone tumors
induced by injections of U in mice, 6: 2567
Bone tumors (cont'd)
induced by Ra, 6: 787
Bones
(See also Hematopoietic system.)
alkaline phosphatase activity of, effects of $\alpha$-particles on, 6: 28
calcification of, effects of phosphates on, 6: 21(J)
calcium metabolism in growing pig, effects of F on, 6: 5940(R)
carbonate of, isotopic turnover studies, 6: 4693(R)
density, radiographic measurement of, 6: 60(J)
deposition of Am, Ca, Pm, Pu, and Sr in, 6: 1389
deposition of Ga ion in, 6: 494
deposition of Ra in, 6: 63(J)
deposition of Ra, Ca, and Pu in, 6: 526(R)
deposition of Sr in, tracer studies, 6: 5041(J)
distribution and radiation effects of colloidal $Au^{198}$ in joints, 6: 6507(J)
distribution of P in long, 6: 3209(J)
effective atomic number of, for $\gamma$ absorption, 6: 5223(J)
exchange reactions of carbonate in, 6: 1609
from Florida phosphate deposits, comparison with Recent bone, 6: 764
growth retardation by x rays, 6: 3167(J)
healing, effect of x and fluorescence radiation on, 6: 3169(J)
hyaluronidase activity in, inhibition of, 6: 3494
incorporation of phosphate into, mechanism of, 6: 22(J)
lead and Sr uptake by, mechanism of, 6: 5971
neutron activated, electromigration studies of P compounds in, 6: 4691(R)
radioautographic analysis of $P^{32}$ in, 6: 3504(J)
radioautography of large undecalcified, 6: 5029(J)
recrystallization of P in, effect of animal age on, 6: 3205
yttrium uptake by, effects of salts of ethylenediaminetetraacetic acid on, 6: 5951
Boric acid
solvent extraction in centrifugal extractor, 6: 5758
Boric acid–1-butanol, 3-methyl-–water systems
solvent partition in centrifugal extractor, 6: 5758
Borines, methylamino-
crystal structure, 6: 5323
Boron
abundance in primary cosmic radiation, 6: 5132(J)
addition of, to aluminum alloy castings for grain refinement, 6: 1253(J)
colorimetric determination in Al, 6: 1140(J)
crystal structure, 6: 5323
determination in graphitic coke, 6: 6006
distribution in brain tissue, 6: 5287(J)
ion exchange determination, 6: 1406(J)
neutron absorption by, reactor oscillator studies, 6: 4917(J)
neutron inelastic-collision cross sections, 6: 5214
neutron total cross sections, 6: 2468(R)
proton reactions (p,$\gamma$), $\gamma$-ray angular correlation for, 6: 4629(J)
proton reactions (p,$\gamma$), $\gamma$ yields from, 6: 6703(J)
spectrographic determination in graphite, 6: 2897(J)
spectrophotometric determination, 6: 1655
Boron carbides
high-temperature reactions with metals, 6: 1216
reactions with titanium carbide above 1920°, 6: 208(J)
thermal conductivity, 6: 915
Boron chlorides
equilibrium constant of, effect of $B^{10}$ and $B^{11}$ on, 6: 4406(J)
molecular structure, 6: 136
production from B-Ta alloy, 6: 3462(P)
volatilities of, effect of $B^{10}$ and $B^{11}$ on, 6: 4406(J)
Boron complexes
with methyl ethers, preparation of deuterated, 6: 2317(J)
Boron compounds
bonding in electron deficient, 6: 5065
detection of thermal neutrons with, dissolved in liquid scintillators, 6: 1286
molecular structure by electron diffraction, 6: 5065
Boron fluorides
(See also Boron trifluorides.)
entropy, enthalpy, free energy, and heat capacity, 6: 3983
thermal properties in ideal gaseous state, 6: 3960
vibrational spectra of solid crystalline, 6: 1666(J)
Boron hydrides
(Covering boranes ($B_2H_6$, etc.) metal borohydrides, etc.)
electron-diffraction analysis, 6: 108(R)
entropy of $B_{10}H_{14}$, 6: 4754
heat of reaction with water, 6: 3218
infrared and Raman spectra of $B_{10}H_{14}$, 6: 4754
molecular structure, 6: 136
preparation of deuterated, 6: 2317(J)
Boron ions
interaction of electron configurations, 6: 3750(J)

Boron ions (cont'd)
range correction for electron pick-up, 6: 6696
Boron isotopes
isotopic effects on $BCl_3$ vapor pressure, 6: 4406(J)
Boron isotopes $B^8$
formation by $B^{10}$ ($\gamma$,2n), $B^{11}$ ($\gamma$,3n), and $C^{12}$ ($\gamma$,p3n), 6: 5682(J)
Boron isotopes $B^{10}$
deuteron bombardment of, $\gamma$ rays from, 6: 440(J)
deuteron bombardment of, internal pairs from, 6: 1009(J)
deuteron reactions (d,p), angular distribution of proton groups from, 6: 5681(J)
energy levels, 6: 6621(R)
energy levels, from $Be^9$ (d,n), 6: 5473, 5671(J)
energy levels, from proton inelastic scattering, 6: 5495(J)
energy levels, two series of, 6: 6148(J)
gamma reactions, 6: 2196(J)
gamma reactions ($\gamma$,2n), 6: 5682(J)
ground state parity, 6: 5230
$\pi^0$ mesons from, by proton reactions, 6: 670
neutron reactions (n,$\alpha$), branching ratios and energy of, 6: 2193(J)
neutron reactions (n,$\alpha$), recoil ionization, 6: 4944
neutron reactions (n,$\alpha$)$Li^{7*}$($\gamma$)$Li^7$, 6: 493(J)
photodisintegration, 6: 371(J)
proton reactions (p,$\alpha$) and (p,p), measurement of ground state Q-values, cross sections, and upper limits for, 6: 6454
proton reactions (p,$He^3$), measurement of ground state Q-values and approximate cross sections for, 6: 6454
separation by thermal diffusion, 6: 2129
targets of, preparation, 6: 2759
in treatment of brain tumors, 6: 2828(J), 5287
Boron isotopes $B^{11}$
deuteron bombardment of, $\gamma$ rays from, 6: 440(J)
deuteron cross sections, 6: 3720(J)
deuteron reactions (d,$\alpha$)$Be^{9*}$, neutron emission following, 6: 6192(J)
deuteron reactions (d,p), 6: 3720(J)
energy levels, 6: 1010(J), 6621(R)
energy levels, from $N^{14}$ (n,$\alpha$), 6: 5882(J)
energy levels, from proton inelastic scattering, 6: 5495(J)
gamma emission from, 6: 1009(J)
gamma reactions, 6: 2196(J)
gamma reactions ($\gamma$,3n), 6: 5682(J)
gamma reactions ($\gamma$,2p), 6: 5682(J)
$\pi^0$ mesons from, by proton reactions, 6: 670
nuclear magnetic moments, 6: 995(J)
proton reactions, tripartition of $C^{12*}$ in, 6: 2179(J)
proton reactions (p,$\alpha$), angular distributions in, 6: 6168(J)
proton reactions (p,$\gamma_1\gamma_2$), angular distribution and correlation of $\gamma$ rays, 6: 5677(J)
proton reactions (p,n), excitation functions for, 6: 1021(J), 6448(J)
range-energy relation for, from $N^{14}$ (n,$\alpha$), 6: 5882(J)
targets of, preparation, 6: 2759
Boron isotopes $B^{12}$
beta emission, 6: 3920(J)
energy levels, 6: 1010(J), 6621(R)
Boron oxides
cryoscopy of, in cryolite-NaF eutectic, 6: 3221(J)
heat of formation of crystalline, from amorphous B and gaseous O, 6: 3218
Boron–tantalum systems
production of $BCl_3$ from, 6: 3462(P)
Boron trifluorides
analysis, 6: 639
infrared absorption spectra, 6: 155
preparation and analysis of, for neutron detection, 6: 639
purification and technique of neutron-counter filling with, 6: 5151(J)
Borosilicate glass
color centers in irradiated, 6: 1419(J)
Bosons
interaction of, selection rules, 6: 2546(J), 5245(J)
selection rules imposed by charge conjugation and charge symmetry, 6: 5923(J)
Boundary layer
displacement effect of three-dimensional, 6: 4047
flow of, near a stagnation point, 6: 1716(J)
Brain
effects of radiation, on lipid fraction of, 6: 3488, 4351
effects of x radiation on, 6: 42(J)
effects of x radiation on histology and cytochemistry of, 6: 6501(J)
infrared spectra of tissues from, effect of lipid fraction on, 6: 3488
lipid content of, determined by infrared spectroscopy of fractions of adult and developing, 6: 4351
Brass
(See also Copper–zinc alloys.)
Brass (cont'd)
annealing textures in rolled, 6: 1242(J)
cathodic sputtering, 6: 252
corrosion, marine, 6: 5100(J)
crystal structure of cold-worked and annealed, neutron-diffraction studies of, 6: 5378
etching, metallography, and phase studies, 6: 1469(R)
fatigue failures in $\alpha$, electron microscope studies of, 6: 2663
interactions with cosmic particles, 6: 4529
porosity, metallographic studies on, 6: 1474
porosity formed by diffusion in, 6: 5388(R)
proton reactions (p,n), 6: 1535, 1859
rolling textures in, 6: 1245(J)
Brass–copper couples
intermetallic diffusion, theory, 6: 2925
porosity, metallographic studies on, 6: 1474
Brass crystals
slip in single, delay time for the initiation of, 6: 1742(J)
Brassfield shales (Tennessee)
x-ray-diffraction analysis, 6: 3781(R)
Breasts
blood coagulation following x irradiation, 6: 3906(J)
Breath
human, chemical analysis for acetone and ammonia, 6: 5550(R)
Breeder reactors
(See also Experimental Breeder Reactor; KAPL Intermediate Power Breeder.)
AEC program for, lecture on, 6: 1318
Bremsstrahlung
angular correlations with $\beta$ particles, 6: 688(J)
angular distribution of, from proton reactions, 6: 337
angular distribution of, from thin targets bombarded by high-energy electrons, 6: 2769(J)
cross section for emission of, calculation, 6: 1563(J)
cross section for emission of, recoil correction to, 6: 5901(J)
cross section for production and angular distribution of, from 17-Mev electrons, 6: 2462(J)
differential cross section for, in limit of high relativistic energies, 6: 5190(J)
effects of electron scattering on, in thin anticathodes, 6: 1890(J)
energy and angular correlation in $P^{32}$ and $Bi^{210}$ $\beta$ decay, 6: 6709
formation of $V^0$ particles by, on C and Pb, 6: 1872(J)
integral cross section for, in limit of high relativistic energies, 6: 5191(J)
intensity distribution of, from $\beta$ particles, 6: 4241(J)
measurement of, from protons, 6: 3386(R)
nuclear reactions ($\gamma$,p) of 300-Mev, on Al, Be, Cd, C, Cu, and Pb, 6: 2487(J)
polarization, 6: 2213(J)
reactions with Cu, Cu($\gamma$,dp), 6: 1531
spatial distribution of, effect of electron scattering on, 6: 1889(J)
theory of, for study of $\beta$ decay, 6: 3106
British Reactors
(See BEPO; GLEEP.)
Brittle materials
shock wave phenomena in, measurement of, 6: 2073(R)
Bromide complexes
equilibrium constants, 6: 535
Bromide space
determination and comparison with chloride, inulin, and Na space in dogs, tracer study, 6: 5970
Bromine
determination of bromate by stannometry, 6: 3234(J)
high-energy n and p reactions, 6: 2493(J)
interchange of fission product, with carrier Br, 6: 3963(J)
neutron and proton charge-exchange reactions in, 6: 1881(J)
oxidation of Fe by, kinetics of, 6: 3744
photoelectron emission from, 6: 1295(J)
preparation of labeled, 6: 6212(P)
primary specific ionization in, at high energy, 6: 4832(J)
proton scattering cross sections, 6: 1546
spectra of solutions in highly acidic, polar solvents, 6: 6338
Szilard-Chalmers reactions in, 6: 2883(J)
thermodynamic properties at zero pressure, 6: 3803
viscosity, temperature dependence of, 6: 6031(J)
Brookhaven shielding facility
mechanical design and component testing, 6: 3874
Brookhaven synchrotron
beams, magnet, and r-f system used for control of, 6: 4525
Bromine–carbon tetrachloride systems
radiation chemistry, 6: 5580
Bromine fluorides
(See also Bromine pentafluorides; Bromine trifluorides.)

Bromine fluorides (cont'd)
nuclear spin echoes of $F^{19}$ in, 6: 2169(J)
Bromine ions
collision of negative, with atoms, 6: 3705(J)
Bromine ions (recoil)
positively charged, 6: 3761
Bromine isotopes $Br^{75}$
positron spectra, 6: 3871(J)
Bromine isotopes $Br^{76}$
identification and decay schemes, 6: 3871(J)
Bromine isotopes $Br^{77}$
decay schemes, 6: 3871(J)
nuclear quadrupole coupling in molecules, 6: 3380(R)
Bromine isotopes $Br^{79}$
gamma reactions $(\gamma,\alpha)$, cross sections measured by using nuclear emulsions, 6: 4952(J)
nuclear electric moments, 6: 988(J)
Bromine isotopes $Br^{80}$
average charge on atoms of, following isomeric transition, 6: 5697
beta emission, spectral deformation, 6: 5519(J)
beta spectra, 6: 3871(J)
chemical kinetics of atomic, from nuclear isomeric transition, 6: 3675
gamma spectra, 6: 1304(R)
isomeric transition, as factor in rupture of C-Br bonds, 6: 5342
isomeric transition effects on reactivity with C, Si, Ge, and Sn tetrachlorides, 6: 5752(J)
production and enrichment, 6: 1698
recoil energy of isomers of, difference between, 6: 2043(J)
retention in complex bromides following isomeric transition, 6: 139(J)
retention in neutron-irradiated propyl bromides, 6: 2884(J)
Bromine isotopes $Br^{81}$
deuteron (d,p) cross sections, 6: 1015(J)
gamma reactions $(\gamma,\alpha)$, cross sections measured by using nuclear emulsions, 6: 4952(J)
nuclear electric moments, 6: 988(J)
nuclear quadrupole coupling in molecules, 6: 3380(R)
Bromine isotopes $Br^{82}$
from $Br^{81}$(d,p) and $Se^{82}$(d,2n), 6: 1015(J)
gamma spectrum, 6: 6192(J)
production and enrichment, 6: 1698
retention in neutron-irradiated propyl bromides, 6: 2884(J)
separation by ion exchange, 6: 2891(J)
Szilard-Chalmers enrichment, 6: 1420(J)
in therapy of carcinoma of the bladder, 6: 5963(J)
Bromine isotopes $Br^{83}$
beta spectra, 6: 3871(J)
decay schemes, 6: 4670(J)
Bromine pentafluorides
infrared and Raman spectra, 6: 1668(J)
Bromine trifluorides
reaction with Pr and Nd compounds and Pt, 6: 2337(J)
thermal data, vapor pressure, and entropy, 6: 3961(J)
Bromoform
molecular structure, from microwave spectra of isotopic species, 6: 5855(R)
Bromoörganic compounds
bond rupture by isomeric transition of $Br^{80}$, 6: 5342
Bronze
(See also Copper–tin alloys; Sodium–tungsten bronze.)
permeability by gas, 6: 1230(R)
Brookhaven National Lab.
atmospheric turbulence studies at, 6: 3828(R)
environs monitoring, manual for operation and maintenance of stations, 6: 5640
meteorological studies at, 6: 677(R)
meteorological studies with oil fog, 6: 5853(J)
meteorology, variation of wind velocity and gusts with height, 6: 6431
progress reports, 6: 492(R), 1552(R), 1746(R), 2800(R), 4802(R), 5713(R)
Brookhaven reactor
control, as affected by forecasting of micrometeorological variables, 6: 5656(J)
power recovery from, 6: 489, 490
design, 6: 1883
design, bibliography, 6: 5891(J)
operation at full energy, 8: 5713(R)
oscillation resonance of, integration of equation for, 6: 4638(J)
proton energy obtained, construction cost, photographs, 6: 5209(J)
testing and component development, 6: 4802(R)
testing of components, 6: 1747
Brown Univ.
progress reports, 6: 5545(R)
Brownian movement
of radioactive particles, 6: 4090(J)
Bubbles
(See also appropriate subheadings under Boiling and under homogeneous reactors.)
formation, bibliography on, 6: 4041
Building materials
(See also specific materials.)
corrosion by water, 6: 4776(R)
Bulk shielding facility
(Oak Ridge National Lab.)
design, 6: 5871
Bull Canyon Area (Colo.)
geophysical exploration, 6: 5597
Bureau of Mines
progress reports, 6: 6555(R)
Burns
(See also subheadings for biological effects under Infrared radiation; Thermal radiation; X radiation; see also appropriate subheadings under specific tissues and materials.)
protective effects of fabrics against, 6: 3185(J)
treatment of, caused by atomic bomb explosions, 6: 3150(J), 3151(J), 3186(J)
Burros
effects of external radiation on, 6: 3896(R)
effects of $\gamma$ radiation on, 6: 5268(J)
effects of size on radiosensitivity, and effects of radiation on blood chemistry, 6: 5940(R)
hematology, 6: 504(R)
1,3-Butadiene (labeled)
synthesis, 6: 1181(J)
Butadiene, diphenyl-
fluorescence of, $\alpha$- or $\gamma$-induced, 6: 653(R)
Butadiene, 1,1,4,4-tetraphenyl-
scintillation properties of solid solution in polystyrene, 6: 6422(J)
Butane, 2-bromo-2-methyl-
synthesis, 6: 4472
Butane, decafluoro-
physical properties, 6: 6558(J)
Butane, dodecafluoro-2-methyl-
physical properties, 6: 5327
Butane, fluoro-2-trifluoromethyl-
molecular dipole moments, 6: 131(J)
Butane, 2-methyl-
bromination with $AlBr_3$, 6: 4472
molecular rearrangement of $C^{14}$-labeled, over $AlBr_3$, 6: 4472
Butane, 2,2,3-trimethyl-
reactions with H and $D_2$, 6: 3219
2,3-Butanedione peroxide
decomposition in acetic acid-2-$C^{14}$, 6: 854
1-Butanethiol
reaction with cyclobutene, hexafluoro-, 6: 1160(J)
2-Butanone, 3-hydroxy- (labeled)
synthesis, 6: 174(J)
Butter
radiation effects on, 6: 4353(R)
Butyl phosphates
anticholinesterase activity, 6: 3199
solvent extraction of trivalent rare earths by, 6: 2632
synthesis of $P^{32}$-labeled, 6: 4466(J)
Butylamine
appearance potentials and bond energies, 6: 4864(J)
Butyric acid, $\alpha$-bromo-
polarographic behavior, 6: 538
Butyric acid, 2-methyl-
metabolism in relation to propionate formation and isoleucine metabolism, 6: 5559
Butyrolactone, perfluoro-
synthesis and chemical and physical properties, 6: 3245(J)


## C


Cables
(See also Coaxial cables; Connectors (electric).)
electric noise from, when subject to shock and vibration, 6: 2696
temperatures of underground concrete-encased, computations, 6: 6618
Cadmium
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
corrosion inhibitors for, 6: 3567
crystal structure, 6: 235(R)
electrodeposition at Hg cathode, 6: 4411, 5311(R)
electrolytic separation from V, 6: 90(R)
gamma reactions $(\gamma,p)$, 6: 2487(J)
gravimetric determination using 2-(hydroxyphenyl)-benzoxazole, 6: 1654

Cadmium (cont'd)
$\pi^-$-meson total cross sections, 6: 2730(J)
neutron capture resonances in, 6: 2468(R)
neutron inelastic-collision cross sections, 6: 5214
solubility in fused $CdCl_2$, 6: 2304(J)
superconducting properties below 1°K, 6: 6371
x-ray spectra, 6: 97(J)
Cadmium chlorides
solubility of Cd in fused, 6: 2304(J)
Cadmium complexes
with cyanide, polarographic study, 6: 5311(R)
with thiocyanate, polarographic study, 6: 98(J)
Cadmium–copper alloys
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
Cadmium crystals
plastic deformation in, x-ray and micrographic study, 6: 1255(J)
x-ray asterisms from deformed single, 6: 1254(J)
Cadmium–gold alloys
phase studies, 6: 1238(R), 3787(R)
phase transformation, non-equilibrium, 6: 5781(R)
phase transformations and thermal expansion, 6: 600(R)
Cadmium iodide crystals
dislocations and spiral growth, 6: 1410(J)
Cadmium iodides
fluorescence, effects of temperature and type of radiation on, 6: 301(J)
Cadmium isotopes
decay schemes and nuclear reactions, 6: 3056(J)
Cadmium isotopes $Cd^{109}$
internal-conversion coefficients, 6: 2146(J)
Cadmium isotopes $Cd^{110}$
internal conversion in, 6: 1919(J)
Cadmium isotopes $Cd^{111}$
energy levels, 6: 1352(J)
excitation curve under neutron bombardment, 6: 407(R)
gamma rays from, angular correlations of, 6: 417(J)
inelastic scattering cross-section ratios for energy levels of, 6: 6458(J)
neutron reactions $(n,n\gamma)$, angular correlation in, 6: 6459(J)
nuclear magnetic moments of excited states, 6: 5463(J)
nuclear magnetic moments of 247-kev level, 6: 347(J)
Cadmium isotopes $Cd^{113}$
neutron reactions $(n,\gamma)$, $\gamma$ spectrum from, 6: 6160(J)
Cadmium isotopes $Cd^{114}$
angular correlation of $\gamma$ rays emitted by, 6: 4924
gamma emission, multipolarities, and angular correlation, 6: 5665(
nuclear energy levels and neutron binding energy, 6: 6160(J)
spin of excited states, 6: 5665(J)
Cadmium isotopes $Cd^{115}$
beta emission, configuration forbiddenness in, 6: 5521(J)
Cadmium isotopes $Cd^{117}$
decay schemes, 6: 6531(R)
gamma emission and half life, 6: 6481(J)
isomers, 6: 4724(R)
isomers, formation in photofission of U, 6: 5298(R)
Cadmium–magnesium alloys
entropy and specific heat, 6: 1472(R)
heats of formation, 6: 1480(J)
thermodynamic properties, 6: 4796(R)
thermodynamic properties of formation, 6: 1479(J)
Cadmium sulfide crystals
conduction properties under electron bombardment, 6: 2044(J), 2144(J)
space charge in, removal of, 6: 2144(J)
Cadmium tungstate crystals
scintillation efficiency, effects of pressure on, 6: 826
Cadmium zinc sulfides
effects of radiation on, 6: 4870(R)
electric properties, 6: 4870(R)
fluorescence and conductivity, 6: 653(R)
induced conductivity and light emission in, 6: 5155(J)
Cages
(See Metabolism cages.)
Calamity Mesa (Colorado)
uraniferous clays in, occurrence and analysis of, 6: 1458
Calcification
(See also Bones.)
effect of calcium complexes of adenosinephosphoric acids on, 6: 5543
Calcite
determination in carbonate-bearing apatites, 6: 1452
Calcium
bone deposition, 6: 526(R), 1389
chromatographic separation, 6: 4439
determination in presence of Ba and Sr by flame photometry, 6: 3752
determination in Na metal, 6: 815
distribution in bones of the growing pig, 6: 2842(J)
fecal excretion as indication of status of, 6: 1986(J)
Calcium (cont'd)
furnacing and casting, 6: 2384(J)
infrared spectra calculations, 6: 161(J)
ion-exchange separation of Li from, 6: 3255(J)
metabolism, effects of fluorine on, 6: 5940(R)
metabolism, effects of low Ca diet and rat age on, 6: 1986(J)
metabolism in Drosophila larvae, 6: 1982
metabolism in plants and animals, 6: 3896(R)
neutron production by $\mu$-meson capture in, 6: 4174(J), 4908(J)
in Portulaca on Eniwetok Atoll following atomic bomb explosion, 6: 3159
spectrographic determination in organic solids, 6: 158
tissue distribution during histaminic shock, 6: 529
tissue distribution in cattle, including exchange reactions in bone, 6: 2287(R)
tissue distribution in plants, effect of withdrawal on, 6: 1980
Calcium cerates
dielectric properties, 6: 2075(J)
Calcium chlorides
electric conductivity and density, 6: 2862
Calcium complexes
dissociation in aqueous solutions, 6: 564(J)
with fatty acids, formation constants of, 6: 77
with tropolone and tropolone-derivative, formation constants of, 6: 6534
Calcium fluorides
chemical reactions producing HF, thermodynamic equilibria, 6: 6557
coloration and luminescence, 6: 142(J)
effects of x radiation on photoelectric current in, 6: 1168(J)
Calcium iodides
scintillation properties of Tl-activated, 6: 1806(J)
Calcium isotopes
mass of $Ca^{42}$, $Ca^{43}$, $Ca^{44}$, and $Ca^{48}$, 6: 991(J)
Calcium isotopes $Ca^{39}$
beta spectra and half lives, 6: 735
Calcium isotopes $Ca^{40}$
chemical determination in biological material, 6: 4732
nuclear stability, 6: 1314(J)
Calcium isotopes $Ca^{41}$
decay scheme, 6: 3122(J)
half life, 6: 2217(J)
Calcium isotopes $Ca^{42}$
binding energy, calculation, 6: 333(J)
Calcium isotopes $Ca^{45}$
beta emission, 6: 1511
disintegration of, average $\beta$ energy per, 6: 3439(J)
motion-picture film on use in agricultural research, 6: 5294(J)
in Portulaca on Eniwetok Atoll following atomic bomb explosion, 6: 3159
radiometric determination, 6: 4732
self-absorption of low-energy particles from, 6: 3097(J)
Calcium isotopes $Ca^{48}$
nuclear stability, 6: 1314(J)
radioactivity of natural, 6: 2530
Calcium nitrates
distribution between water and 1-hexanol, 6: 102
Calcium oxalates
precipitation from homogeneous solutions, 6: 2602(J)
Calcium oxide–magnesium oxide–zirconium oxide systems
phase studies, 6: 3604(J)
Calcium oxide–zirconium oxide systems
constitution diagrams, 6: 3604(J)
fluorite phase in, 6: 3528(J)
Calcium oxides
cryoscopy in cryolite-NaF eutectic, 6: 3221(J)
Calcium phosphates
removal of F from $H_2O$ by, mechanism of, 6: 4423(J)
toxicity, distribution, and excretion in rats, 6: 2833
Calcium sulfates
neutron bombardment, forms of P resulting from, 6: 3238(J)
Calcium sulfides
solid solutions with Ce sulfides, 6: 4012(J)
Calcium titanates
dielectric properties, 6: 2075(J)
Calcium uranyl carbonates
preparation and properties, 6: 5087(J)
Calculators
(See Computers.)
Calibration
(See also as subheading.)
errors involving, statistical method for combining, 6: 3623
statistical methods in, 6: 951
California
airborne radioactivity survey of Kern, Riverside, and San Bernardino Counties, 6: 6055
California Inst. of Tech.
progress reports, 6: 2665(R)

Calorimeters
adiabatic, design, 6: 868
for determination of energy of cyclotron He ion beam, design, 6: 6291(R)
for high temperature solid state measurements, 6: 5136(R)
for measuring heat capacity of corrosive liquids, design, 6: 1164(R)
for measuring heat capacity of Ga, 6: 2589
for measuring thermal capacity of neptunium oxides at low temperatures, design, 6: 4037
micro, design and performance, 6: 2903(J)
sensitivity and thermal capacity, 6: 960(R)
Calorimetry
in fast neutron measurement, 6: 4693(R)
Calutrons
charge materials for stable isotope separation, survey, 6: 1791
Cameras
(See also Photography; X-ray cameras.)
aerosol particle size measurements, design and calibration, 6: 4043
Buerger precession, 6: 617
forward-angle scattering, for determining particulate concentrations in aerosols, 6: 3305(R)
forward-angle scattering, for studying size-frequency distribution of aerosols, 6: 4091(R)
gamma-ray pinhole, for tumor location, 6: 521
gamma-ray pinhole, uses in photographing in vivo radioautographs and for ground survey, 6: 2574, 3157(R)
interferometer, for transient-pressure recording, 6: 5813
for low temperature work, 6: 244(J)
for use with Wilson cloud chambers, 6: 945(J)
x-ray-diffraction, design, 6: 3810(J)
Canadian reactors
(See NRX reactor.)
Cancer
(See Carcinomas; Sarcomas; and Tumors.)
Capillaries
(See also Blood vessels.)
fragility of, as a factor in anemia following irradiation, 6: 1599
fragility of, radioinduced, 6: 3210(J), 3497(J)
permeability of, induced by radiation, 6: 25, 1598
Caproic acid
adsorption by steam activated C black, 6: 3546
Caproic acid, α-bromo-
polarographic behavior, 6: 538
Caprylic acid, α-bromo-
polarographic behavior, 6: 538
Capture-to-fission ratios
(See also as subheading under fissionable elements and isotopes; see also Neutron cross sections.)
relationship to neutron binding energies, empirical analysis of, 6: 6678
Carbamic acid, ethyl ester
metabolism, 6: 3207(J)
protective action against x radiation, 6: 1386(J)
synthesis of labeled, 6: 3207(J)
Carbanilic acid, isopropyl ester
synthesis of $C^{14}$-labeled, 6: 4460(J)
Carbazyl, picryl-N-amino-
paramagnetic resonance absorption, 6: 1166
Carbides
attack by water vapor and organic vapors, 6: 6011(J)
preparation, crystal structure, and melting points, 6: 3566(J)
Carbohydrates
biosynthesis by Ustilago zeae, 6: 759
biosynthesis of $C^{14}$-labeled, by sugar beets, 6: 6341(J)
ion exchange separation from plant extracts, 6: 101
metabolism, effects of K on, 6: 758
metabolism, inhibitory action of steroids on, 6: 4352(R)
metabolism in formation of amino acids in the mouse, 6: 2639
metabolism in normal and leukemic leukocytes, 6: 4344
Carbohydrazide, diphenylthio-
reactions with Ru, 6: 2595
Carboloy
(See Tungsten carbides.)
Carbon
(see also Carbon black; Diamonds; Graphite.)
absorption of cosmic particles in, 6: 258(J)
absorption of cosmic photons in, 6: 258(J)
adsorption of A, N, and methanol on, 6: 1425(R)
adsorption of O on, as factor in combustion, 6: 1669(J)
adsorptive properties, effect of steam activation on, 6: 3546
amorphous, crystallography and surface area of, 6: 3997(J)
appearance potential of, in mass spectra of substituted methanes, 6: 4755(J)
atomic weight, 6: 3972(J)
coherent neutron scattering amplitude, 6: 1903(J)
Carbon (cont'd)
combustion and mounting techniques for radioactive, 6: 1650
combustion determination, 6: 106, 592
corrosion by $H_2O_2$, 6: 240(J)
cosmic-ray penetrating showers in, multiplicities of, 6: 6085(J)
determination in NaK alloy, 6: 3229
determination of organic total C and $C^{14}$ simultaneously, micro-method, 6: 4731
deuteron reactions (d,p), 6: 2710
disintegration induced by 330-Mev protons, physical analysis of, 6: 6453
distribution of fixed, in rats, 6: 4693(R)
effects of growth and body size on turnover of fixed, tracer studies, 6: 5037
effects on lattice parameters of Mo, 6: 2095(J)
electron scattering by, 6: 1035(J)
energy levels in, from $Be^9(\alpha,n)$, 6: 3684(R)
energy spectra of protons scattered from, 6: 388, 1753
formation of $V^6$ particles by bremsstrahlung on, 6: 1872(J)
gamma absorption coefficients, experimental and theoretical, 6: 5217(J)
gamma reactions (γ,n) at 320 and 160 Mev, 6: 1538
gamma reactions (γ,p), 6: 701, 2487(J)
gamma reactions (γ,p), energy and angular distributions, 6: 5486(R)
heat of sublimation, 6: 4755(J)
heat of sublimation, direct determination of, 6: 4527(J)
heat of sublimation and vaporization, 6: 6654
helium ion ($He^3$) reactions yielding $C^{11}$ and $N^{13}$, 6: 6166(J)
infrared spectra calculations, 6: 161(J)
interactions of π mesons with, 6: 1823(J)
isotopic chemical effects, 6: 6526(R)
mesic atoms formed by π-mesons and, x-ray emission of, 6: 5650
meson cross sections, 6: 4593
meson production cross sections, 6: 4594
mesons from, by photon reactions, 6: 3033(J), 3649(J)
π-meson absorption and scattering in, 6: 3370(J)
π-meson interaction cross sections at very high energies, 6: 5405
π-meson scattering by, second-order perturbation treatment, 6: 5848(J)
π mesons from, by neutron and proton reactions, 6: 5454(R)
$\pi^-$-meson total cross sections, 6: 2730(J)
$\pi^0$ mesons from, by photon reactions, 6: 317
$\pi^\pm$ mesons from, by proton reactions, 6: 2165(J)
$\pi^\pm$ mesons scattered from, angular distribution of, 6: 2448
metabolism as related to $C^{14}$ radiotoxicology, 6: 1609
metabolism in photosynthesis, 6: 1720
neutron and proton charge-exchange reactions in, 6: 1881(J)
neutron cross sections, 6: 5856
neutron inelastic-collision cross sections, 6: 5214
neutron reactions, 6: 2493(J), 3580(R)
neutron reactions, cross sections, 6: 5454(R)
neutron total cross sections, 6: 1017(J), 1023(J), 1525, 1526, 2467
nuclear momentum distribution in, inferred from proton scattering, 6: 1841
nuclear spallation, cross sections for products of, 6: 5856
nucleon momentum distributions in, from proton scattering data, 6: 5464(J)
path in photosynthesis, 6: 2580
penetrating showers produced in, by cosmic radiation, 6: 266(J)
photon production cross sections, 6: 4594
photon reactions (γ,π), charge ratio of mesons from, 6: 4596
preparation of pure, from organic materials, 6: 3813(J)
proton elastic scattering cross sections, 6: 3422(J)
proton fission, 6: 6625
proton reactions, 6: 2493(J)
proton reactions (p,n), 6: 370(J), 1887
proton reactions (p,n), neutron energy distribution from, 6: 2484
proton reactions (p,π), cross sections, 6: 3825
proton reactions (p,$\pi^0$), 6: 1865, 4594, 5847
proton reactions (p,$\pi^0$), γ spectra from, 6: 362
proton reactions and spallation products, 6: 3672
proton scattering by, 6: 2710, 3090, 3095(J)
proton scattering cross section, 6: 1546
proton spectra, 6: 1821(R)
ratio of, to P in photosynthesis intermediates, 6: 168
reaction with $CO_2$ at 900°C, 6: 4410(J)
spectral emissivity between 1285 and 2035°K, 6: 3559
thermal and electrical conductivities and crystallite size of, as function of heat treatment, 6: 4745(J)
thermal conductivity of baked, temperature dependence of, 6: 3799(J)
thermodynamic properties at zero pressure, 6: 3803
transition probabilities for diatomic, by dipole velocity operator, 6: 256
turnover in the mouse, tracer study, 6: 5968
Carbon black
particle size measurement, 6: 3805

Carbon bromides
electric conductivity and molecular properties, 6: 1415
Carbon chlorides
(See also Carbon tetrachloride.)
electric conductivity and molecular properties, 6: 1415
Carbon–chromium–titanium systems
phase studies, 6: 6061
Carbon dioxides
absorption by ethylenediamine, 6: 5570
charge in the C–O bond of, distribution, 6: 2301
chemical determination, 6: 3212(R)
determination, bibliography on, 6: 110
excitation potentials and range of $\alpha$ particles in, 6: 4238(J)
fixation in barley roots, 6: 1703
fluorescence of, excited by $\alpha$ particles, 6: 2521(J)
ionization potentials from mass spectrography, 6: 291(J)
isotopic enrichment by heavy C isotopes, 6: 6214(P)
isotopic exchange reactions with $PbCO_3$, 6: 6526(R)
mass spectra, 6: 3547
metabolism in Scenedesmus, 6: 531
metabolism in x-irradiated dogs, 6: 510(R)
as precursors of amino acids in casein, 6: 5967
production by plants from foliar applications of urea, rates of, 6: 4716
radiation chemistry in a solution of iron sulphate, 6: 2328
reaction with C at 900°C, 6: 4410(J)
reduction to HCOOH with $LiAlH_4$, 6: 5043(R)
self diffusion in, at moderate pressures, 6: 934
self diffusion in, at 100 to 1000 atm, 6: 2691
self-diffusion in, up to 150 atm pressure, 6: 801
separation from CO and $CH_4$, 6: 6526(R)
thermodynamic properties at zero pressure, 6: 3803
thermo-osmosis through rubber, 6: 1776(J)
Carbon fluorides
(See Fluorocarbons.)
Carbon ion beams
electron pickup by, in nuclear emulsions, 6: 656
production of high intensity, 6: 3580(R)
synchrocyclotron, in nuclear emulsion studies of, 6: 6691(J)
Carbon ion beams ($C^{12}$)
nuclear reactions in emulsions, 6: 5876
range-energy relation in nuclear emulsions, 6: 5876
Carbon ion beams ($C^{13}$)
nuclear reactions in emulsions, 6: 5876
Carbon ions
interaction of electron configurations, 6: 3750(J)
Carbon–iron–magnesium systems
corrosion, effects of impurities on, 6: 3573(R)
Carbon isotopes
in alkaline intrusions, composition, 6: 3569(J)
chemical effects on decarboxylation of malonic acid, temperature factors, 6: 5560
determination in organic compounds, 6: 104
determination in organic materials, micromethod, 6: 4731
deuteron reactions, survey, 6: 6621(R)
energy levels of $\alpha$-particle models for, 6: 691(J)
enrichment of $CO_2$ with, 6: 6214(P)
estimation of radioactive, equipment for, 6: 663(J)
fractionation during absorption by $Ba(OH)_2$ solutions, 6: 3815(J)
gamma spectra of, from $B^{10}(p,n)$, 6: 1911
isotopic effects in carbonyl-group reactions, 6: 3964(J)
isotopic effects on decarboxylation of malonic and bromomalonic acids, 6: 5299, 5729
isotopic effects on decarboxylation of oxalic acid, 6: 832
isotopic exchange reactions between carbonates and bicarbonates, mechanism of, 6: 4470
$\pi$-meson reactions, 6: 4163(J)
proton reactions, survey, 6: 6621(R)
ratio of $C^{12}$ to $C^{13}$ in magmatic rocks, 6: 6400(J)
relative abundance in nature, 6: 1793
Carbon isotopes $C^{11}$
energy levels, 6: 987
formation by $\pi$-mesons on O and N, 6: 2183(J)
formation by proton bombardment of Cu, 6: 700
gamma emission from, 6: 1009(J)
yield from protons on medium and heavy elements, 6: 3853(J)
Carbon isotopes $C^{12}$
angular distribution and correlation of $\gamma$ rays from $B^{11}$ $(p,\gamma_1\gamma_2)$, 6: 5677(J)
deuteron reactions (d,n), angular distribution of neutrons from, 6: 708(J)
deuteron reactions (d,p), 6: 2494(J)
deuteron reactions (d,p), angular distributions, 6: 5456(R), 5680(J)
deuteron reactions (d,p), Q value, 6: 4955(J)
Carbon isotopes $C^{12}$ (cont'd)
disintegration by $\pi$-meson reactions, 6: 2194(J)
energy level at 7 Mev, decay by pair emission, 6: 5516(J)
energy levels, 6: 699, 987
energy levels, from inelastic proton scattering, 6: 5462(J), 5495(J)
energy levels from $Be^9(\alpha,n)$, 6: 2474(J)
formation by $N^{14}$ $(d,\alpha)$, 6: 1870(J)
gamma reactions $(\gamma,3\alpha)$, 6: 699, 709(J), 1331(J)
gamma reactions $(\gamma,3\alpha)$, absolute cross sections for Li $\gamma$ radiation, 6: 6460(J)
gamma reactions $(\gamma,3\alpha)$, multiple resonances in, 6: 5884(J)
gamma reactions $(\gamma,n)$, 6: 963, 1871(J)
gamma reactions $(\gamma,n)$, measurement of cross section of, 6: 2167, 2464
gamma reactions $(\gamma,n)$, resonances in, 6: 372(J)
gamma reactions $(\gamma,p)$, angular distributions, 6: 5199(J)
gamma reactions $(\gamma,p\alpha)$, identification in nuclear emulsions, 6: 4943
gamma reactions $(\gamma,p3n)$, 6: 5682(J)
mass, 6: 991(J), 1793
$\pi^-$ mesons from, by proton reactions, 6: 974
$\pi^0$ mesons from, by proton reactions, 6: 670
neutron reactions (n,p), 6: 1821(R)
neutron scattering cross sections, 6: 4935(J)
nuclear energy levels of, from $O^{16}$ $(\gamma,4\alpha)$, 6: 6163(J)
photodisintegration, 6: 1861, 2192(J), 2196(J), 3685
photodisintegration, $\alpha$-$\alpha$ correlations in, 6: 704(J)
proton bombardment, 6: 376(J)
proton inelastic scattering by, angular distributions, 6: 5456(R)
proton reactions $(p,\gamma)$, 6: 1879(J)
proton reactions (p,4p), threshold energy, 6: 5646(J)
proton reactions $(p,p\gamma)$, 6: 1533
proton reactions (p,p'), $\gamma$ spectrum from, 6: 1918(J)
proton reactions (p,pn), cross section at 142 Mev, 6: 5907(J)
proton reactions (p,pn), excitation of $C^{11}$ in noncapture, 6: 4951(J)
proton reactions (p,pn) excitation functions to 100 Mev, 6: 6448(J)
proton scattering cross sections, 6: 4242(J)
proton scattering cross sections, 6: 4242(J)
protons inelastically scattered from, angular distribution, 6: 4243(J)
relative abundance in plants, 6: 5256(J)
shell model calculation of the photodisintegration of, into three $\alpha$ particles, 6: 1003
spin and parity of 16.11-Mev level of, 6: 6168(J)
spin of 4.5-Mev energy level, 6: 5677(J)
tripartition of compound nucleus, 6: 2179(J)
Carbon isotopes $C^{13}$
binding energy of, calculation, 6: 333(J)
deuteron reactions (d,n), angular distribution of neutrons from, 6: 5230
deuteron reactions (d,p), angular distribution of protons from, 6: 5680(J)
effect on malonic acid decarboxylation, 6: 2864(J)
energy levels, from $C^{12}$ (d,p), 6: 2494(J)
energy levels, from $O^{16}$ $(n,\alpha)$, 6: 5882(J)
energy levels, from proton inelastic scattering, 6: 5495(J)
energy levels, two series of, 6: 6148(J)
mass, calculated from Q value of $C^{12}$ (d,p), 6: 4955(J)
neutron scattering cross sections, 6: 1548
neutron total scattering cross sections, 6: 2767(J)
properties of energy states, 6: 1859
proton capture cross sections, 6: 1875(J)
proton reactions $(p,\gamma)$, 6: 2188(J)
proton reactions (p,n), excitation functions for, 6: 367(J), 1021(J)
radiometric determination, 6: 1628
range-energy relation for, from $O^{16}$ $(n,\alpha)$, 6: 5882(J)
relative abundance in plants, 6: 5256
spectra, isotope shifts in, 6: 445
spin and angular moment of 8.20-Mev level, 6: 4935(J)
Carbon isotopes $C^{14}$
age determination with, labs. performing, 6: 5796(J)
in age estimations of archeological specimens, 6: 3483(J)
age estimations with, 6: 4882(J)
age estimations with, use of gas-filled proportional counter in, 6: 6418(J)
atmospheric, production by cosmic neutrons, 6: 4101(J)
beta decay, 6: 5230
beta-decay lifetime, difficulty in-$\beta$-decay theory due to, 6: 6191
beta emission, configuration forbiddenness in, 6: 5521(J)
compounds labeled with, methods of synthesis and bibliography, 6: 5976(J)
determination in organic compounds, 6: 1408(J)
determination in organic materials by wet combustion, 6: 3909(J)
determination in relics, 6: 755(J)
determination with ionization chambers, 6: 2439(J)
determination with proportional counters, 6: 5836(J)
determination techniques, 6: 3813(J)

Carbon isotopes $C^{14}$ (cont'd)
dosage determinations in patients receiving $C^{14}$-methylene-labeled glycine, 6: 3202
effects on leukemia in mouse, 6: 3928(J)
effects on rate of rupture and formation of C-C bonds, 6: 3248(R)
excretion rate in humans, 6: 4084(R)
formation in N capture of cosmic neutrons, 6: 2390
ground state parities, 6: 3074, 5230
half life and average $\beta$ energy relationship, calorimetric determination, 6: 4668(J)
hazards involved in laboratory use of, 6: 2272(J)
isotopic chemical effects in biological systems, 6: 1387
isotopic chemical effects in decarboxylation of malonic acids, 6: 831
labeling fungi with, and effects on growth, 6: 4387
measurement with $CO_2$ ionization chambers, 6: 654
metabolism, 6: 526(R)
metabolism cage-hood assembly for small animals metabolizing, design, 6: 3201(J)
nuclear properties, 6: 1928
permissible limits for bone, 6: 1609
production rate by cosmic neutrons in atmosphere, 6: 3323(J)
proportional counting in gas phase, 6: 5456(R)
proton reactions (p,n), 6: 407(R)
radioactive emissions from, counting in volatile liquids, 6: 3549(J)
radiometric determination, 6: 5695
tissue distribution and toxicology in tracer amounts, 6: 3202
toxicology, 6: 4690(R)
tracer applications in biology and industry, 6: 3202
tracer applications in study of Wagner rearrangement, 6: 4398
urinary excretion from patients receiving $C^{14}$-methylene-labeled glycine, 6: 6270(R)
Carbon–magnesium systems
corrosion, effects of impurities on, 6: 3573(R)
Carbon–manganese–titanium systems
phase studies, 6: 6061
Carbon monoxides
chemical determination, 6: 3212(R)
oxidation over $CuO^{18}$, 6: 177(J)
reaction with C at 900°C, 6: 4410(J)
separation from $CO_2$ and $CH_4$, 6: 6526(R)
thermodynamic properties at zero pressure, 6: 3803
Carbon steel
cerium impregnation of surface layers, 6: 912(J)
corrosion by water, 6: 4776(R)
Carbon–tantalum systems
lattice constants, 6: 5607
Carbon–tantalum–titanium systems
constitution diagrams, 6: 5607
lattice constants, 6: 5607
Carbon tetrachloride
isotopic exchange reactions with $Cl_2$, 6: 2596(R)
reactivity of $Br^{80}$ with, effect of isomeric transition on, 6: 5752(J)
solvent extraction of Ge(IV) by, 6: 6531(R)
Carbon tetrachloride–bromine systems
radiation chemistry, 6: 5580
Carbon tetrachloride–methanol systems
vapor-liquid equilibria in solutions of low methanol concentration, 6: 2297
Carbon tetrafluoride
infrared spectra, 6: 3130(J)
intermolecular forces in, 6: 2880(J)
neutron scattering by, 6: 5215
Carbon–titanium systems
constitution diagrams, 6: 5607
Carbonate complexes
with cerium, spectrophotometric studies of, 6: 5311(R)
Carbonate ions
isotopic exchange reactions with cobalt(III) complexes, 6: 6526(R)
Carbonates
bone turnover as affected by age, growth, body size, duration of exposure to $CO_2$, and ambient $CO_2$ concentration, 6: 1609
isotopic exchange reactions, kinetics of, 6: 4470
Carbonium compounds
carbonium ion rearrangements, 6: 1533
molecular rearrangement, 6: 4724(R), 6531(R)
solvolysis, tracer study of ion structure and rearrangements, 6: 5298(R)
Carbonyl chloride fluoride
infrared and Raman spectra, 6: 6204(J)
Carbonyl fluorides
infrared and Raman spectra, 6: 6204(J)
Carbonyl sulfides
hyperfine structure due to $S^{33}$, 6: 2480(J)
microwave spectra of isotopic, 6: 340(J)
Carboxypeptidases
formation of $H_2O_2$ by $\alpha$ irradiation of solutions of, 6: 6328(J)
Carcinogenesis
role of negative hydrocarbon free radicals in, 6: 6528
Carcinogens
(See also specific carcinogens; see also Carcinomas.)
effects of dueteron bombardment on, 6: 1170(J)
effects on rate of division in giant amoeba, 6: 4352(R)
graying of hair in mice by, 6: 2570(J)
Carcinomas
(See also specific carcinomas, organs, tissues, animals, etc.; see also Carcinogens; Sarcomas.)
bladder, treatment by intracavity irradiation with solutions of $Na^{24}$ and $Br^{82}$, 6: 5963(J)
female genital tract, radiotherapy with $Co^{60}$ applicators, 6: 3189
mammary, growth rate before and after irradiation, 6: 1091(J)
metastasis of transplantable mouse mammary, after x irradiation, 6: 6256(J)
primary lung and bronchiogenic, radiotherapy with Ag-coated $Au^{198}$ metallic colloids, 6: 2575(J)
prostate, colloidal $Au^{198}$ in therapy, 6: 6281(J)
radioisotope therapy of, review, 6: 3927(J)
radiotherapy, review, 6: 3935(J)
radiotherapy with $Co^{60}$, 6: 1105(J)
radiotherapy with colloidal $Au^{198}$, 6: 2831(J), 3507(J)
radiotherapy with $I^{131}$, 6: 68(J)
radiotherapy with $I^{131}$-labeled tetraiodophenolphthalein, 6: 4378(J)
thorotrast-induced, clinical studies, 6: 3907(J)
transplantation of human, to chorioallantoic membranes of egg embryos, 6: 5927
transplantation of human, into hamster cheek pouch, 6: 5926
x-ray induced, on hands on dentists, 6: 6254(J)
Caribou Mine (Colorado)
uranium occurrence, 6: 213
Carnegie Inst. of Tech.
progress reports, 6: 597(R), 3959(R), 4793(R)
progress reports on grain boundary diffusion in alloys, 6: 6610(R)
Carnotite ores
(See also Uranium ores.)
age estimation, chemical analysis for, 6: 6053
detection by $\alpha$-particle emission from drill cores, 6: 211
mining in Colorado Plateau, 6: 2077(J)
Carotenoids
occurrence in blue-green algae, 6: 14
Carrizo Mountains Area (Ariz.)
preliminary geologic map, 6: 5779
Cascade showers
(See also Cosmic showers.)
distribution functions, calculation of, 6: 6081(J)
electron-photon, combinatorial problem in, 6: 4538(J)
electron-photon, solution of fluctuation problem in, 6: 4823(J)
fluctuation problem in theory of, plans for numerical computations, 6: 4536(J)
Janossy equation for, solution, 6: 2241(J)
in lead Monte Carlo study of, 6: 3816(J)
moments of electron-photon and nucleon, including ionization loss, 6: 5800(J)
nucleon, fluctuation problem in finite absorber, 6: 5407(J)
nucleon, fluctuation problem in homogeneous nuclear matter, 6: 5408(J)
Case Inst. of Tech.
progress reports, 6: 680(R)
Casein
metabolism by young calf, tracer studies, 6: 5557
Cashiers District (North Carolina)
pegmatite minerals of rare earth type in, 6: 4496
Cast iron
fatigue resistance to combined stresses, 6: 6350
Casting
(See also appropriate subheadings under specific materials; see also Furnaces; Induction heating.)
apparatus for metal, 6: 3466(P)
Casy Lease (Colorado)
prospecting for U, 6: 1456
Catalases
inactivation by fast deuterons, heat, and a combination of the two, 6: 1602(J)
inactivation by radiation, 6: 4353(R)
poisons affecting metabolic activity of, in relation to radiosensitivity changes, 6: 6262(J)
Catalysis
efficiency, determination by thermoluminescence, 6: 6617
mechanism in oxidation of CO, 6: 177(J)

Catalysts
(See headings by materials, e.g., Palladium catalysts; see Enzymes.)
Cataracts
formation, use of cysteine to prevent, 6: 2270(J)
formation by grenz rays, 6: 2264(J)
formation in lenses of newborn mice following x irradiation of heads, 6: 1952(J)
radioinduced, histology and clinical manifestations of, 6: 2271(J)
radioinduced, in mice, 6: 506(R), 763
radioinduced, in rabbits, 6: 505
x-ray induced, 6: 5716(R)
x-ray induced, chemical prophylaxis of, 6: 4358(J)
Cathode-ray tubes
(see also Storage tubes.)
calibration unit for, 6: 1579(P)
in color television, 6: 1834
for counting and switching applications, design, 6: 4561(R)
Cathodes
(See also Cathode-ray tubes; Electrodes; Electron tubes; Mercury cathodes.)
intensification of electron beam obtained from factors affecting, 6: 3338(R)
sputtering of metal from, for micro-diffusion studies, 6: 252
thermionic, tracer studies of evaporation from, 6: 5529(J)
Catholic Univ. of America
progress reports on rate processes in inorganic solids, 6: 6301(R)
Cation exchanging materials
equilibrium constants of, prediction from osmotic data, 6: 2859
Cations
removal from water by phosphate coagulation, 6: 6576
Cattle
acetate metabolism in milk formation, tracer studies, 6: 4385
casein metabolism by young, tracer studies, 6: 5557
metabolic rate and radioactivity of $CO_2$ expired by, respiration apparatus for measuring, 6: 2850(J)
phosphorus metabolism in young, 6: 4382, 4383
Cavity resonators
electromagnetic field in semi-infinite cylinder closed at one end, 6: 4232(J)
energy (Q) measurements, 6: 4111
spheroidal, resonance of small spheroidal object in, 6: 253
Cells
(See Animal cells; Cytology; Dry batteries; Plant cells.)
Celluloid
multiple scattering of electrons in, 6: 5502(J)
Cellulose
effects of radiation on, 6: 493(J)
Cements
(See also Concretes; Mortars.)
corrosion by $H_2O_2$, 6: 240(J)
for obtaining adherence between Pu and U samples and Ta ribbon filament for mass spectrographic analysis, 6: 5238
properties, 6: 1437
shielding properties, survey, 6: 3445
Central Aerosol Labs., Columbia Univ.
progress reports, 6: 3304(R), 3305(R), 3306(R), 4091(R)
Centrifugal pumps
flow in vaneless diffusor space, effect of friction on, 6: 2654
Hayward-Tyler, cleaning, 6: 1443
mechanical, in Alplaus (Genie) heat-transfer system, design and performance, 6: 5366
Centrifugation
ultra, theoretical considerations on cell shape, convection, and an area anomaly pertinent to developing moving boundary theory for, 6: 5303
Centrifuges
Podbielniak liquid-liquid extractor, operation, 6: 5758
Ceramic coatings
(See also subheadings under base materials and units being coated.)
for protection of low carbon steel at elevated temperatures, 6: 6595
testing for wet exhaust mufflers and piping, 6: 203
Ceramic materials
(See also Refractory materials.)
corrosion by water, 6: 4776(R)
dielectric properties measured by electromagnetic resonators, 6: 1493
interactions with metals at high temperatures, 6: 205
Ceramic–metal couples
interfacial reactions, 6: 1449(R), 2924
Ceramic–metal systems
(See Cermets.)
Cerenkov radiation
(See Cherenkov radiation.)
Cerium
electric conductivity at low temperatures, 6: 5380
Cerium (cont'd)
fractional-precipitation separation from La, 6: 1174(J)
Hall coefficient, 6: 4804(R)
impregnation of steel with, 6: 912(J)
neutron-diffraction scattering amplitudes, 6: 2118(J)
neutron scattering cross sections, 6: 5399(R)
oxidation, 6: 2334(J)
oxidation in humid air, mechanism, 6: 4011(J)
production by electrolytic and thermal reduction processes, 6: 1688(J), 2942(J)
removal of interference by, in fluorimetric determination of U, 6: 3231
deparation from monazite, 6: 5069(J)
spectrographic determination in rare earth mixtures, 6: 2308
thermodynamic properties, 6: 560, 840
volumetric determination by titration against $KMnO_4$, 6: 5321(J)
x rays of, in $Nd^{149}$ decay, 6: 4657
Cerium acetylacetonate
exchange and hydrolysis reactions, 6: 3248(R)
Cerium borides
paramagnetic properties of $CeB_6$, 6: 4993(J)
Cerium chlorides
activity coefficients, conductances, and transference numbers, 6: 562
activity coefficients in aqueous solutions, 6: 558
thermodynamic properties, 6: 560, 839
transference numbers, 6: 563
Cerium complexes
with carbonate, spectrophotometric studies of, 6: 5311(R)
chemical properties, 6: 4724(R)
Cerium compounds
thermodynamic properties, 6: 840
Cerium ions
oxidation and reduction by radiation, 6: 146(J)
Cerium(III) ions
distribution between melts and solid phase, 6: 2857
Cerium(IV) ions
oxidation of chloride ions by, kinetics, 6: 4393
Cerium isotopes
proton binding energy and shell structure in, 6: 3049(J)
Cerium isotopes $Ce^{140}$
neutron scattering cross sections, 6: 5399(R)
preparation of carrier-free, 6: 1422
spins of excited states of, from $La^{140}$ $\beta$ decay, 6: 1917(J)
Cerium isotopes $Ce^{141}$
beta and $\gamma$ spectra, measurement, 6: 3119(J)
decay schemes, 6: 424(J)
Cerium isotopes $Ce^{143}$
neutron scattering cross sections, 6: 5399(R)
Cerium isotopes $Ce^{144}$
beta spectra, 6: 2790(J)
decay schemes, 6: 5517(J)
in photoneutron sources, 6: 3434
Cerium–magnesium–thorium alloys
creep resistance and tensile properties, 6: 2097(J)
Cerium oxalates
thermodynamic properties, 6: 560
Cerium oxide–praseodymium oxide systems
reduction by $H_2$, 6: 1683(J)
Cerium oxide–thorium oxide systems
reduction by $H_2$, 6: 1683(J)
Cerium oxide–uranium oxide systems
phase studies and crystal structure, 6: 5572(J)
semiconductive properties, 6: 2062(J)
Cerium oxides
cryoscopy in cryolite-NaF eutectic, 6: 3221(J)
dielectric properties, 6: 2075(J)
reduction by $H_2$, 6: 1683(J)
reaction with $H_2O$, 6: 4011(J)
Cerium (IV) oxides
neutron diffraction by, 6: 2118(J)
Cerium selenides
preparation and phase studies, 6: 4012(J)
Cerium silicides
preparation and crystal structure, 6: 2335(J)
Cerium(III) sulfate complexes
dissociation constant, 6: 1682
Cerium sulfates
as chemical radiation dosimeters, 6: 2996
paramagnetic resonance absorption in, 6: 1359(J)
radical pair yields from radioinduced reduction of, 6: 5344
Cerium(IV) sulfates
reduction by $\alpha$ and $Li^7$ particles in pile-irradiated B solution, 6: 5066(J)
reduction of solutions of, by electrons, 6: 2629(J)
reduction of solutions of, by x and $\gamma$ rays, 6: 2628(J)

Cerium sulfides
preparation and phase studies, 6: 4012(J)
Cermets
(See also specific cermets, indexed by constituents.)
elastic and other properties of sintered Al, 6: 5099(J)
preparation for service at elevated temperatures, 6: 2655(R)
sintering, equipment for studying, 6: 205
surface tension, wettability, interface reactions and sintering for service at elevated temperatures, 6: 2655(R)
Cesium
average charge on atoms of, after Xe $\beta$ decay, 6: 5696
chromatographic separation from Rb and K, 6: 848(J)
metabolism in rats, dairy cows, and beef cattle, 6: 5940(R)
proton reactions at high energies, 6: 5875(R)
tissue distribution, 6: 3896(R)
tissue distribution in goldfish, 6: 5933(R)
Cesium (liquid)
viscosity, 6: 2006(J)
Cesium chlorides
activity coefficients, 6: 2643(J)
microwave absorption spectra at high temperatures, 6: 4674(J)
Cesium fluoride crystals
scintillation properties under $\alpha$ and $\gamma$ irradiation, 6: 5645(J)
Cesium fluorides
composition and structure, containing excess F, 6: 2033(J)
Cesium iodides
luminescence, temperature effects, 6: 6125(J)
scintillation properties of Tl-activated, 6: 1806(J)
Cesium isotopes
nuclear properties, 6: 1928
nuclear reactions, 6: 3110(J)
radioactivity, 6: 3110(J)
Cesium isotopes $Cs^{130}$
decay schemes, 6: 5518(J)
Cesium isotopes $Cs^{133}$
nuclear magnetic resonance absorption-line broadening in metal, 6: 6445(J)
sign of quadrupole interaction energy of, in $Cs_2$, 6: 3836(J)
Cesium isotopes $Cs^{134}$
close doublet in internal conversion spectrum following $\beta$ decay of, 6: 5141(J)
decay schemes, 6: 689(J), 3106
gamma emission from, polarization and angular correlation of, 6: 430(J)
gamma spectrum, 6: 6198(J)
hyperfine structure, 6: 5789(R)
nuclear spin, 6: 1909
nuclear spin and magnetic moment by magnetic resonance method, 6: 6683(J)
preparation of carrier-free, 6: 1422
spectra, 6: 742(J)
Cesium isotopes $Cs^{135}$
preparation of carrier-free, 6: 1422
Cesium isotopes $Cs^{136}$
yield and half lives of, from $U^{233}$ and $U^{235}$ fission, 6: 1857
Cesium isotopes $Cs^{137}$
gamma emission, measurement with pressure ionization, 6: 3642(J)
as gamma source in multicurie teletherapy units, 6: 5960
gamma spectra, 6: 2708
for radiotherapy, 6: 2274(J)
Cesium sulfides
thermal conductivity, 6: 4074
Cesium vanadium sulfates
absorption spectra, 6: 1647(J)
Chain reactions
(General theory of nuclear chain reactions; see also specific fissionable isotopes; see also Criticality studies; Multiplication factor; and Reactors—theory.)
production of first, at Univ. of Chicago, 6: 353
Chalk River Project (Canada)
progress reports, 6: 5417(R)
Chalk River reactor
(See NRX reactor.)
Charcoal
adsorptive properties, 6: 4020
magnetic susceptibility, 6: 4020
Chattanooga shales (Ky.)
genesis and physical properties, 6: 5777
Chattanooga shales (Tenn.)
genesis and physical properties, 6: 5777
x-ray-diffraction analysis, 6: 3781(R)
Chelates
(See also organic compounds used as chelating agents; see also main headings by name of metal chelated; see also appropriate subheadings under specific materials.)
Chelates (cont'd)
chemical stability, 6: 1632
ionization of metal–$\beta$-diketone, 6: 1993, 1994
ionization of Ni, in ethanol, 6: 1995
stability in solution, 6: 6299
structure and chemical properties of, with benzoxazoles, benzothiazoles, and benzothiazolines, 6: 6582
structure and chemical properties of, with dimethylglyoxime and its oxygen monomethyl ether, 6: 496(R)
toxicology, 6: 496(R)
Chelidamic acid, 3,5-diiodo-1-methyl-, disodium salt
$I^{131}$-labeled, as radiographic contrast medium, 6: 4377(J)
Chemical analysis
(See also specific methods of analysis; see also as subheading under materials analyzed.)
by measurement of nuclear magnetic resonance, 6: 1142(J)
solubility theory applied to problems in, 6: 2310
by x-rays, review of methods, 6: 3758(J)
Chemical radiation detectors
(See also Radiation detection instruments (colorimetric).)
calibration and performance, 6: 1343
design, 6: 4748(R)
in measurement of $\gamma$ radiation, 6: 6662
procedures for using ferrous and ceric sulfate solutions as, 6: 2996
reader for phosphate-glass $\gamma$-radiation dosimeter, 6: 6122(R)
Chemical and Radiological Labs., Army Chemical Center
progress reports, 6: 2135(R), 2136(R)
Chemical warfare
eddy-diffusion theory in relation to, 6: 756
meteorological aspects, 6: 757
Chemical warfare agents
(See also specific agents.)
dispersal, 6: 757
Chemistry
(See also Biochemistry; Cytochemistry; Radiation chemistry; Radiochemistry.)
inorganic, cation screening as basic principle of, 6: 5984
Chemotherapy
(See as subheading under pathological conditions.)
Cherenkov detectors
operation, 6: 4583(J)
resolving time limitations of, 6: 6417(J)
Cherenkov radiation
angular width, influence of multiple scattering on, 6: 5896(J)
applied to cosmic-ray albedo measurements, 6: 2965(J)
contribution to energy loss of charged particle by ionization, 6: 6699(J)
contribution to ionization loss of relativistic charged particles, 6: 5216(J)
counter for measurement, 6: 1512
detection and measurement, 6: 299, 4886(J)
detection and measurement with a Cherenkov detector, 6: 2978
emission of, theory, 6: 3431(J)
induced in water by $\gamma$ and $\beta$ radiation, 6: 5509
from irradiated U in $H_2O$, 6: 1511
measurement of intensity as function of incident-particle energy, 6: 6701(J)
particle counting by using, 6: 4583(J)
Chickens
(See also Eggs.)
radiation effects on, age factors influencing, 6: 4692(R)
Chloride complexes
with copper, spectrophotometric studies of, 6: 5311(R)
equilibrium constants, 6: 535
Chloride space
determination and comparison with bromide, inulin, and Na space in dogs, tracer study, 6: 5970
Chlorides
detection of particles in atmosphere, 6: 2603(J)
fluorination with ammonium fluoride, 6: 133(J)
metabolism in x-irradiated dogs, 6: 510(R)
oxidation by Ce(IV), ions, kinetics, 6: 4393
Chlorine
effects on incorporation of phosphate into lipides by liver slices, 6: 799
isotopic exchange reactions with $PCl_3$, $TeCl_4$, and $CCl_4$, 6: 2596(R)
thermodynamic properties at zero pressures, 6: 3803
Chlorine fluorides
(See also Chlorine trifluorides.)
thermodynamic properties of monofluoride in ideal-gas state, 6: 2027
Chlorine ions
collision of negative, with atoms, 6: 3705(J)
Chlorine isotopes
nuclear quadrupole coupling constants, 6: 6446(J)
Chlorine isotopes $Cl^{33}$
beta spectra and half lives, 6: 735

Chlorine isotopes $Cl^{34}$
gamma spectra, 6: 1351(J)
Chlorine isotopes $Cl^{35}$
interaction constants for, in TlCl, 6: 2735(J), 2736(J)
mass, 6: 991(J)
neutron reactions (n,γ), 6: 5472
nuclear magnetic moment and coupling constants, 6: 1310(J)
nuclear quadrupole coupling frequencies of, correlation with Hammett's σ, 6: 6680
nuclear quadrupole coupling in molecules, 6: 3380(R)
nuclear quadrupole coupling ratio of $Cl^{37}$ and, 6: 4628(J)
nuclear quadrupole resonance lines, theory, 6: 341(J)
nuclear resonance, 6: 2744
quadrupole interaction energy in KCl, sign of, 6: 3836(J)
quadrupole moment calculated from hfs, 6: 3680(J)
quadrupole resonance in p-$C_6H_4Cl_2$, 6: 692(J)
quadrupole spectra and couplings in substituted methanes, 6: 1308(J)
Chlorine isotopes $Cl^{36}$
beta spectra, 6: 3436, 3867
blackening of photographic plates by β particles from, 6: 1287
energy levels of, from $Cl^{35}$ (n,γ), 6: 5472
gamma emission and decay scheme, 6: 3122(J)
nuclear properties, 6: 1928
nuclear spin and quadrupole moments, 6: 3379(J)
separation by ion exchange, 6: 2891(J)
Chlorine isotopes $Cl^{37}$
average charge on, as product of $A^{37}$ decay, 6: 5507(J)
interaction constants for, in TlCl, 6: 2735(J), 2736(J),
mass, 6: 991(J)
nuclear magnetic moment and coupling constants, 6: 1310(J)
nuclear quadrupole coupling ratio of $Cl^{35}$ and, 6: 4628(J)
proton reactions (p,n), 6: 407(R), 2755(J), 4633(J)
proton reactions (p,n), excitation functions for, 6: 1021(J)
quadrupole interaction energy in KCl, sign of, 6: 3836(J)
quadrupole moment calculated from hfs, 6: 3680
quadrupole resonance in p-$C_6H_4Cl_2$, 6: 692(J)
Chlorine isotopes $Cl^{38}$
in reducing ascites, 6: 1595
Chlorine isotopes $Cl^{39}$
mass, calculated from mass of $A^{39}$, 6: 6151
Chlorine trifluorides
crystal structure, 6: 6000
dielectric constant and molar polarization, 6: 2881(J)
entropy and molecular structure, 6: 6320(J)
as fluorinating agent for preparation of $CoF_3$, $NiF_2$ and $AgF_2$, 6: 2618(J)
free energy, entropy, and heat capacities, 6: 4422(J)
handling, for crystal structure determination, 6: 6000
reaction with Pr and Nd compounds, 6: 2337(J)
Chloroform
chemical effects of γ-radiation on, 6: 5345
decomposition products of, identification, 6: 5345
microwave spectra and molecular structure, 6: 4434(R)
purification, 6: 5345
solvent extraction of Ge(IV) by, 6: 6531(R)
Chlorohydrocarbons
(See also Halocarbons; Halohydrocarbons.)
fluorination with $SbF_3$, 6: 1664(J)
Chloroörganic compounds
(See also specific organic compounds; see also Halocarbons; Halohydrocarbons.)
fission of carbon-halogen bond in, by polarographic methods, 6: 3232
proton stopping by, 6: 718
proton stopping by, effect of chemical structure on, 6: 6180
Chlorophenol red
decolorization induced by radiation, 6: 2620
Chlorophyll
absorption spectra, 6: 159
occurrence in blue-green algae, 6: 14
role in "Hill reaction," 6: 498
spectrographic analysis of equilibrium of, 6: 4391
Chloroplasts
back reaction in photolysis of $H_2O$ by, 6: 567
electrode reactions of isolated fragments, 6: 2885
evolution of $O_2$ by isolated, 6: 534
inhibition of photochemical activity in isolated, 6: 2886(R)
luminescence, potentiometric measurement of, 6: 1601(J)
photochemical reactions, 6: 2885
photolysis of $H_2O$ by illuminated, 6: 2303(J)
Cholanthrene
chemical properties effects of radiation on, 6: 1170(J)
Cholesterol
carcinogenic action, effects of radiation on, 6: 2564
chemical properties, effects of radiation on, 6: 1170(J)
Cholesterol (cont'd)
colorimetric determination with purified digitonin precipitate and anthrone reagent, 6: 6539
metabolism, 6: 497(R)
metabolism in rabbits, effects of inositol and octadecyl alcohol on, 6: 3482
metabolism in rats, 6: 3204
preparation of deuterated, 6: 2614(J)
preparation of deuterium-labeled, from egg yolks, 6: 6344(J)
time factors in synthesis of labeled, in rats and mice, 6: 4718
tritium-labeled, uses in study of cholesterol metabolism, 6: 3944(J)
Cholesterol (labeled)
biosynthesis by liver slices, 6: 174(J)
Choline
metabolism in biosynthesis of formates, 6: 2837
prophylactic use of mecholyl and carcholin in pulmonary edema produced by air blast, 6: 5539
Choline, acetyl-
effects on intestine from irradiated rats, 6: 3171(J)
Choline chloride
synthesis of $C^{14}$-chain-labeled, 6: 2055(J)
Cholinergic blocking drugs
(See also specific drugs.)
effects on mortality of x-irradiated mice, 6: 5277
Chromates
as corrosion inhibitors, review, 6: 6043(J)
Chromatographic analysis
(See also as subheading under specific materials.)
paper, of steroids, 6: 4016
Chromatographic separations
of calcium and P ions, 6: 4439
Chromatography
(See also Electrochromatography.)
applied to large scale separations of $N^{15}$-labeled amino acids, 6: 2050(J)
automatic scanner for paper chromatograms, 6: 5442(J)
equipment for automatic determination of radioactivity on chromatograms, 6: 4157(J)
in identification of flavonoid compounds, 6: 1969(J)
instrument for detecting radioaptive material on paper chromatogram, 6: 4877(J)
paper, in analysis of light Al alloys, 6: 5993(J)
paper, radioactive-tracer techniques in, 6: 5084(J)
Chrome alums
crystalline field in, 6: 2166(R)
paramagnetic energy levels in, calculation, 6: 4179(R)
physical properties at low temperatures, 6: 4389
Chromic acid
oxidation of isopropyl alcohol by, D isotopic effects and effect of chloride ion, 6: 5733(J)
Chromic phosphates (labeled)
tissue distribution and radiation effects after injection into brain in therapy of intracranial tumors, 6: 6287(J)
Chromium
absorption spectra in HCl, 6: 4735(J)
antiferromagnetic properties of, from neutron-diffraction studies, 6: 3674
by-product recovery from titaniferous magnetite, 6: 911(J)
freezing point, 6: 1259(J)
isolated-atom potential for neutral, 6: 4179(R)
neutron cross sections, 6: 1304(R), 1526
neutron inelastic scattering by, 6: 4590(J)
neutron scattering by, 6: 980
physical properties, review of literature and bibliography, 6: 4075
polarographic determination, in Al alloys, 6: 1407(J)
radiometric determination, 6: 2018(J)
specific heat between 1.8 and 4.2°K, 6: 5620(J)
x-ray spectra, 6: 5789(R)
Chromium alloys
sigma phase in, 6: 1246(J)
Chromium–aluminum compounds (intermetallic)
x-ray-diffraction analysis, 6: 199
Chromium–aluminum–titanium alloys
mechanical properties and transformation temperatures, 6: 5606(R)
preparation and constitution diagrams, 6: 4780(R)
Chromium borides
preparation and physical properties, 6: 4408(J)
Chromium–carbon–titanium systems
phase studies, 6: 6061
Chromium coatings
for wear resistance increase of Al and Al alloys, 6: 6354(J)
Chromium–cobalt–iron alloys
phase studies, 6: 2086

Chromium–cobalt–iron–nickel alloys
creep properties, effects of cold-work on, 6: 1207
phase studies, 6: 2086
thermal rupture, effects of chemical composition on, 6: 5381
Chromium–cobalt–molybdenum alloys
phase studies, 6: 3785
Chromium–cobalt–molybdenum–nickel alloys
phase studies, 6: 3785
Chromium–cobalt–nickel alloys
constitution diagrams at 1200°C, 6: 2085
phase studies, 6: 2086
Chromium compounds
oxidation and reduction by radiation, 6: 2215(J)
Chromium–iron alloys
corrosion by liquid Bi, 6: 900
crystal structure of σ phase, 6: 5324(J)
intercrystalline corrosion by $HNO_3$ and $H_3PO_4$, 6: 5103(J)
Chromium–iron–titanium alloys
isothermal transformation characteristics, 6: 2937(J)
Chromium isotopes $Cr^{48}$
formation in Fe spallation, 6: 1862
Chromium isotopes $Cr^{50}$
mass, 6: 3128, 5188(J)
Chromium isotopes $Cr^{51}$
decay schemes, 6: 650(R)
energy levels, from (p,n) reactions on $V^{51}$, 6: 4633(J)
Chromium isotopes $Cr^{52}$
binding energy, 6: 989(J)
mass, 6: 3128
Chromium isotopes $Cr^{53}$
hyperfine structure and spin, 6: 2177(J)
proton reactions (p,n), 6: 359, 407(R), 2497(J), 4633(J)
Chromium isotopes $Cr^{54}$
proton reactions (p,n), 6: 359, 407(R), 2497(J)
Chromium–manganese alloys
phase studies, 6: 1259(J)
Chromium–molybdenum–nickel alloys
phase studies, 6: 3785
Chromium–molybdenum–titanium alloys
constitution diagrams, 6: 4792(R), 5384(R)
heat treatment, 6: 5384(R)
Chromium–niobium alloys
crystal structure from x-ray-diffraction data, 6: 1249(J)
Chromium–nitrogen–titanium systems
phase studies, 6: 6062(R)
Chromium–tantalum alloys
crystal structure from x-ray-diffraction data, 6: 1249(J)
Chromium–titanium alloys
constitution diagrams, 6: 5113(J)
corrosion, 6: 4777(R)
phase studies, 6: 5384(R), 5603
preparation and properties, 6: 2094(J)
Chromium–uranium alloys
crystal structure, 6: 121(J)
crystal structure of β phase, 6: 1183
magnetic susceptibility, 6: 1433
Chromium–zirconium alloys
constitution diagrams, 6: 591(R), 2098(J), 4505(R)
tensile properties, 6: 3791
Chromosomes
(See also Genetics; Mitosis.)
chemical prophylaxis of radiation injuries to, 6: 6277(J)
crossing-over in maize, evidence for, 6: 3891
distribution and behavior of supernumerary, in Trillium erectum, 6: 2247
effects of radiation on, 6: 39(J), 769(J)
fragmentation by x and β rays, 6: 2250
gamete factor on No. 9, in maize, 6: 1946
indirect effects of x rays on, in production of mutations in Drosophila, 6: 6266(J)
radioinduced aberrations, effects of glutathione against, 6: 2255
radiosensitivity during different stages of meiosis, 6: 1949
radiosensitivity, effect of 0 tension on, 6: 1946
structure of, in bacteria, 6: 5536
x- and γ-ray induced aberrations in, effects of infrared radiation on, 6: 27
x- and γ-ray-induced and $O_2$-induced aberrations in, 6: 4
x-ray-induced aberrations in, effects of $O_2$ and temperature on, 6: 26
x-ray-induced aberrations in, effects of $O_2$ on, 6: 24
x-ray-induced breakage in maize, effects of $O_2$ on, 6: 5942(J)
Chronographs
circular sweep, for single millisecond time intervals, 6: 4125(J)
Chymotrypsin
enzyme–substrate complex, 6: 1987
Chymotrypsin (cont'd)
protection by competitive inhibitors against radiation damage, 6: 1094
Cinnamic acid
determination and separation of Th with, 6: 5052(J)
Circuits
(See also Coincidence circuits; Differentiating circuits; Electronic filters; Feedback systems; Quenching circuits; Timing circuits.)
electrical, response to exponential driving forces, 6: 3334
printed conductors for, production and testing for use in laboratory instruments, 6: 5416
response of nonlinear devices to pulsed signal and gated noise, 6: 2128
thermoelectrically balanced meter network, design, 6: 3471(P)
Circulatory diseases
(See also Blood circulation; Blood vessels.)
chemotherapy, 6: 497(R)
Citrate complexes
with Be, ion exchange studies, 6: 3518
Citrates
biosynthesis, effects of nitrogen mustard and steriods on, 6: 2557(R)
biosynthesis in rat tissues, effect of nitrogen mustards on, 6: 4352(R)
biosynthesis mechanism in fungi, 6: 3951(J)
protective effects against radiation injury, 6: 2562
Citric acid
biosynthesis of, role of one-carbon compounds in, 6: 3954(J)
synthesis of $C^{14}$-labeled, 6: 4024(J)
Civilian defense
(See also Radiological defense; Radiological warfare.)
medical organization, 6: 3146(J)
Clay deposits (Colo.-Utah)
x-ray-diffraction analysis, 6: 5776
Clay deposits (uraniferous)
uranium occurrence in, 6: 1728(J)
Clays (uraniferous)
red and gray, underlying ore-bearing sandstone of Morrison Formation in western Colo., 6: 1458
Clinch River
radium and Rn content, variations in, 6: 4373(R)
Clinton graphite reactor
(See ORNL graphite reactor.)
Cloud chambers
camera for use with, 6: 945(J)
condensation of supersaturated ion-free vapors in, theory, 6: 4555(J)
continuous low-pressure He, performance, 6: 4875(J)
continuously sensitive, design of, 6: 664(J)
controlled by proportional counter, 6: 4581(R)
for cosmic ray studies, design, 6: 962, 3386(R)
design, 6: 4581(R)
design and application to studies of low energy range-energy relations, 6: 4582
diffusion-type continuously operated, modification for α-spectra studies of short-lived radioisotopes, 6: 5150(J)
emulsion, for study of interactions of high energy primary cosmic radiation, 6: 4529
high pressure, technique and advantages in cosmic ray study, 6: 6467(J)
high pressure diffusion, design, 6: 316
with internal NaI trigger, for cosmic-ray research, 6: 4827(J)
ionization of gases by α particles in, mechanism, 6: 5449(J)
large-size, for cosmic-ray research, 6: 4893(J)
with magnetic field, design, 6: 2156(J), 3854(R)
in measurement of lifetime of unstable particles, 6: 6137(J)
multiplate, operation, 6: 5404(R)
multiple-scattering theory applied to measurements with, 6: 5496(J)
for observation of μ capture in Pb, 6: 4581(R)
with sodium iodide crystal, detection of nuclear interaction by, 6: 4581(R)
timing apparatus for, 6: 478(P)
upward-diffusion type, design, 6: 4156(J)
Cloud-ion chambers
design, 6: 4581(R)
design and operation, 6: 1815(J)
Coal deposits (Mont.)
reconnaissance for uraniferous, 6: 6599
Coatings
(See also names of coatings identified by material or by method of application.)
vapor deposition, 6: 2941(J)
Coaxial cables
driver for, using a triode amplifier, 6: 2999
Cobalt
anion exchange in HCl, 6: 1689(J)
colorimetric determination in Ti and Ti alloys using nitroso R salt, 6: 3523
corrosion by liquid Pb and Bi, 6: 5601
effects on erythrocyte count of anemic fish, 6: 5933(R)
electric resistance and magnetoresistance at low temperatures, 6: 5622(J)

Cobalt (cont'd)
extraction from Ni in pulse column, 6: 5757
gamma reactions (γ,n) and Szilard-Chalmers reaction, 6: 4660
gamma reactions (γ,p), angular distribution, 6: 5201(J)
neutron capture cross sections, measured by pile-oscillation method, 6: 3426(J)
neutron diffraction pattern for, 6: 1038(J)
neutron total cross sections as function of energy, 6: 5499(J)
neutron transmission cross sections, 6: 2479(J)
proton reactions, yields and cross sections, 6: 4945
proton reactions at high energies, 6: 5875(R)
radiosensitivity effects, 6: 3181
spectral configuration interaction, matrix components, 6: 4672
volumetric determination in Co-U alloys, 6: 2309
Cobalt alloys
corrosion by liquid Bi, 6: 900
mechanical properties at high temperatures, 6: 2930
Cobalt chloride–ammonia systems
phase studies, 6: 2678(R)
Cobalt(II) chlorides
solvation in water and acetone, 6: 78
Cobalt–chromium–iron alloys
phase studies, 6: 2086
Cobalt–chromium–iron–nickel alloys
creep properties, effects of cold-work on, 6: 1207
phase studies, 6: 2086
thermal rupture, effects of chemical composition on, 6: 5381
Cobalt–chromium–molybdenum alloys
phase studies, 6: 3785
Cobalt–chromium–molybdenum–nickel alloys
phase studies, 6: 3785
Cobalt–chromium–nickel alloys
constitution diagrams at 1200°C, 6: 2085
phase studies, 6: 2086
Cobalt complexes
dissociation in aqueous solutions, 6: 564(J)
ion-exchange separation of isomeric dinitrotetramminecobalt(III) ions, 6: 6012
magnetic properties, 6: 1628
with 2-methyl-8-quinolinol, stability, 6: 1141(J)
oxidation-reduction reactions in solution, mechanism, 6: 6529
with tropolone and tropolone-derivative, formation constants, 6: 6534
Cobalt(III) complexes
isotopic exchange reactions with $CO_2$, 6: 6526(R)
isotopic exchange reactions with carbonate ions, 6: 3211(R)
reduction with stannite, 6: 1992
Cobalt(II) fluorides
neutron diffraction analysis, 6: 1548
preparation, and magnetic susceptibility at intermediate temperatures, 6: 6078
Cobalt(III) fluorides
fluorination of heterocyclic compounds with, 6: 2031(J)
preparation by $ClF_3$ fluorination, 6: 2618(J)
Cobalt ions
magnetic susceptibility, 6: 4020
Cobalt–iron alloys
recrystallization, 6: 5109(R)
recrystallization, effects of magnetic field on, 6: 601(R)
Cobalt isotopes $Co^{56}$
isomer formation ratio, 6: 4660
preparation of isomers by Szilard-Chalmers reaction, 6: 3073
Cobalt isotopes $Co^{57}$
deuteron reactions (d,2p), 6: 1790
deuteron reactions (d,2p), target manipulation, 6: 5886(J)
hyperfine splitting, 6: 4211(J)
internal conversion in, accompanying decay of $Fe^{57}$, 6: 3868
mass, 6: 368(J)
neutron activation cross sections, 6: 3391
proton reactions (p,n), 6: 4633(J)
proton reactions (p,n), threshold, 6: 368(J)
tritium reactions, 6: 3111(J)
Cobalt isotopes $Co^{60}$
angular correlation of successive quanta emitted by aligned, 6: 5236(J)
angular distribution and polarization of γ emission by aligned, 6: 5237(J)
applicators for therapeutic uses in female genital tract carcinomas, 6: 3189
beta spectrum, 6: 5511(J)
cancer therapy unit with, at Univ. Hospital, Saskatoon, Canada, 6: 786(J)
decay schemes, 6: 650(R), 2225(J), 3106
exposure chamber to house a 100 curie source, design, 6: 3344
food preservation uses, 6: 3889(R)
gamma emission, anisotropy, 6: 997(J)
Cobalt isotopes $Co^{60}$ (cont'd)
gamma emission, measurement with pressure ionization chamber, 6: 3642(J)
gamma-gamma angular correlation in, 6: 1913(J)
gamma rays from, absorption in 27 elements, 6: 2203(J)
gamma rays from, polarization and angular correlation, 6: 430(J), 2225(J)
gamma rays from, polarization by double scattering, 6: 1898(J)
half lives, determination by automatic recording electroscope, 6: 5417(R)
half lives measured by differential ionization method, 6: 1357(J)
internal conversion and isomeric transition, 6: 409
internal conversion of γ rays accompanying β decay of, 6: 5511(J)
magnetic moment of nucleus, 6: 4211(J)
mixture with plastics for use in raditherapy, 6: 1107(J)
motion-picture film on use in agricultural research, 6: 5294(J)
nuclear alignment in paramagnetic salts, 6: 2472(J)
nuclear magnetic moment by nuclear alignment, 6: 3068(J)
in 1000-c teletherapy unit, radiation output, depth dose, and isodose distributions, 6: 6517
radiotherapy units using preparation and use, 6: 1102(J)
secondary-electron spectra produced by γ radiation from, in water, 6: 4244(J)
teletherapy units using, design and construction, 6: 5289(J)
teletherapy units using, room-protection measurements for, 6: 5033(J)
therapeutic source at Saskatchewan, design, 6: 3926(J)
in treatment of non-resectable head and neck cancer, 6: 1103(J)
in treatment of uterine carcinomas, 6: 1105(J)
Cobalt isotopes $Co^{61}$
from $Cu^{63}$ (γ,α), 6: 1012(J)
decay schemes, 6: 1354(J)
radioactivity, 6: 3111(J)
Cobalt–molybdenum–nickel alloys
phase studies, 6: 3785
Cobalt nitrates
distribution, between water and 1-hexanol, 6: 102
electric conductivity in acetophenone, 6: 84
heats of solution in $H_2O$ and organic solvents, and binding energies of molecular ligands, 6: 3216
Cobalt–uranium alloys
analysis, scheme for complete, 6: 2309
of composition $UCo_2$, 6: 471(P)
magnetic susceptibility, 6: 1433
Cobalt–uranium compounds (Intermetallic)
of composition $U_6Co$, 6: 472(P)
Cockcroft-Walton accelerators
(See also Kevatrons.)
for acceleration of $H^3$ and $He^3$ ions, 6: 1886(J)
auxiliary equipment for angular distribution measurements, 6: 5843(J)
design, 6: 5684(J)
design of 1.2-Mev at Australian National Univ., 6: 5483(J)
Coding
(See as subheading under names of things coded, e.g. Computers—coding.)
Coincidence circuits
(Circuits peculiar to specific instruments are indexed with the instruments.)
for cosmic radiation detection, 6: 610(R)
design, 6: 634(J), 3478(P)
design, and application to studies of $Mo^{93}$, $Pd^{103}$, $Hf^{181}$, 6: 2159(J)
design of photomultiplier, for use with scintillation detectors, 6: 4318(P)
for detection of cosmic rays, design, 6: 2151(J)
in fluorescence and conductivity studies, 6: 1392(R)
for gamma-ray correlation measurements, 6: 4629(J)
multiple channel, design, 6: 297
pulse-equalizing, for scintillation counters, 6: 1798
for pulse-type radiation detection instruments, 6: 5435(J)
radio telemetering in, 6: 1265(J)
with resolving time of $5 \times 10^{-9}$ sec, design, 6: 2998
for scintillation counters, symposium on, 6: 5163(J)
for scintillation detectors, design, 6: 2433, 2714(J)
single amplifier, design, 6: 4855(J)
6NN6 gated-beam tube as fast, 6: 5818(J)
testing by γ-ray velocity, 6: 2983(J)
for testing scintillation counters, 6: 5440(J)
Coincidence counters
design, 6: 5417(R)
for detecting x ray-γ ray coincidences, design, 6: 4630(J)
hodoscope unit with neon lamps normally off, operation, 6: 5816(J)
Coke
analysis for B, 6: 6006
graphitization, by thermal decomposition of hydrocarbon gases, 6: 6006
Colchicine
effects of x radiation and, on cells, 6: 36

Colitis
fecal lysozyme titer in, effect of ACTH on, 6: 9
Collagen
effects of radiation on, 6: 493(J)
College of Sciences and Arts, State Coll. of Wash.
progress reports, 6: 535(R)
Colloids
(See also specific materials in the form Graphite (colloidal), see also Aerosols; Smokes.)
coagulation, effect of radiation on, 6: 2331(J)
diffusion of micelles in soap and other, 6: 5566
effects of particle size on blood clearance and tissue distribution of radiogold, 6: 6297(J)
light scattering by, 6: 3800(R)
method for study of radio-, 6: 2893(J)
preparation of monodisperse radioactive gold, 6: 6302(J)
vibration potentials of, theory and measurement, 6: 3798
Colorado
radioactive tertiary porphyries in Central City district, Gilpin Co., 6: 6356
Colorado (Boulder Co.)
exploration of Caribou Mine area, 6: 213
uranothorite in Blue Jay Mine, occurrence and identification, 6: 1453
Colorado (Clear Creek Co.)
prospecting of Robineau Claims, 6: 214
Colorado (Larimer Co.)
geology and prospecting of Case Lease, Treasure Hill Area, Treasure Hill Claims, and West Point Claim for U, 6: 1456
Colorado (Mesa Co.)
uraniferous clays in, occurrence and analysis, 6: 1458
Colorado (Montrose Co.)
uraniferous clays in, occurrence and analysis, 6: 1458
Colorado Plateau
6: 891(R)
geology, 6: 5597, 5776
mining of U ores in, 6: 2077(J)
Colorado Univ.
progress reports, 6: 2590(R)
Columbia Radiation Lab., Columbia Univ.
progress reports, 6: 1782(R)
Columbia River
radioactive plankton from, 6: 513
Columbia Univ.
progress reports, 6: 600(R), 1304(R), 1469(R), 3790(R), 3800(R), 4353(R), 5090(R), 5117(R), 5302(R)
progress reports on food irradiation and associated studies, 6: 2569(R)
progress reports on heating and cooling by natural convection, 6: 2363(R), 2364(R)
progress reports on isotope concentration in a thermal diffusion column, 6: 3253(R)
progress reports on mass transfer in liquid metal and fused salt systems, 6: 2361(R), 2362(R), 2909(R), 6607(R)
Columbia Univ. School of Mines
progress reports, 6: 1173(R), 1238(R), 3787(R)
progress reports on diffusionless phase changes in solid alloys, 6: 5781(R)
Columbium
(See Niobium.)
Combustion
(See also as subheading under specific materials.)
apparatus for, of T-labeled organic compounds, 6: 2353(J)
effects of ionizing radiation on, 6: 2356(R)
Commissariat a l'energie atomique
experimental facilities, neutron standards, 6: 6456(J)
program for discovery and development of U deposits in France, 6: 3284(J)
Communication systems
theory, 6: 1750(R), 4085(R), 5789(R)
Complexes
(See as main heading under materials complexed, e.g., Uranium complexes.)
Compressible flow
equations governing, elementary solutions of, 6: 3270(J)
in inclined pipelines, theory, 6: 6030(J)
matrix and relaxation solutions for determining, 6: 5360
operator methods in irrotational subsonic, 6: 3777
Compton effect
in aluminum, Au, Ag, and Th, 6: 4967(J)
calculation by nonlocal interactions in field theory, 6: 6700(J)
calculation in quantum field theory, 6: 5004(J)
cross section for, variation with $\gamma$ energy, 6: 5894
differential cross section for, radiative corrections to, 6: 2205(J)
multiple Compton scattering of low-energy $\gamma$ radiation, theory, 6: 2762(J)
Compton effect (cont'd)
polarization of electrons in scattering by, 6: 5898(J)
polarization of $\gamma$ quanta by, 6: 3427(J)
polarization states in electromagnetic, meson, or photomeson, calculation, 6: 3453(J)
Computers
(Calculating devices; mechanical and electrical; see also Reactor simulators; Storage tubes.)
application to processing x-ray-diffraction data, 6: 2993(R)
application to solution of aerodynamical lift and moment calculations, 6: 2993(R)
application to variational calculation of nuclear scattering, 6: 2993(R)
coding for, floating decimal system, 6: 5425
coding for, short-hand, 6: 3330
design and operation, 6: 939, 940, 1750(R)
design of analog, 6: 4085(R), 5789(R)
differential analyzer for orbit problems in cyclotrons, 6: 2448
floating decimal panels for IBM card programmed electronic, 6: 3331
an FM-AM multiplier, design and performance, 6: 1781
gated decade circuit for, 6: 6649
general-purpose electronic, design, performance, and operation, 6: 6397
line divider as an aid in calculating graphs, design of, 6: 1784
manual on construction and maintenance of UCRL synchro driven differential analyzer, 6: 3342
self-service use of IBM card-programmed electronic, equipped with 8-digit floating-point control panels, 6: 3349
at UCRL, general description, 6: 4919
Concrete aggregates
(See also specific materials used as aggregates.)
preparation of high-density, using pressure grouting and other methods, 6: 1437
shielding properties, survey on, 6: 3445
Concretes
(See also Cements; Reactor materials; Shielding materials.)
corrosion by $H_2O_2$, 6: 240(J)
gamma transmission through, build-up factors for, 6: 2768(J)
neutron absorption by, 6: 3103(J)
polyethylene coatings for, specifications, equipment and methods of application, 6: 1724
preparation and properties of, using pumice as aggregate, 6: 1206
preparation of high-density, using pressure grouting and other methods, 6: 1437
x-ray absorption by, 6: 3430(J)
Condensation
in cloud chambers, theory, 6: 4555(J)
Conductivity
(See Electric conductivity; Thermal conductivity.)
Conductometric analysis
application of direct constant current to, 6: 4412
Congo ores
(See Pitchblende.)
Connecticut Univ.
progress reports, 6: 5322(R)
Connectors (electric)
(See also Cables; Electric power.)
printed, production and testing for use in circuits of laboratory instruments, 6: 5416
Constants and conversion factors
(Includes only miscellaneous constants not covered specifically elsewhere; see also Atomic constants.)
for calculation of association constants of complex ion systems, 6: 4572
for evaluating radiation injuries quantitatively, 6: 4355, 5267
for pile engineering, 6: 1482
tables, 6: 5123(J)
Containers
(See subheadings handling and storage under specific materials; see Pressure vessels.)
Contamination
(See also Radioactive contamination.)
diffusion from a single source, mathematical analysis of, 6: 1442
measurement in vacuum systems, 6: 1804(J)
Convection
(See also Heat transfer.)
equation of thermal, 6: 623(J)
magneto-hydrodynamic effects on, in a magnetic field, 6: 1715(J)
Convection (forced)
effects on effectiveness of heaters, 6: 581(J)
heat transfer, 6: 871(J)
heat transfer and associated pressure drop of air flowing through smooth tubes for varying temperatures and conditions, 6: 3268
heat transfer by, in pipe system with volume heat source within the fluids, 6: 5091
heat transfer by, in Pt tubes, 6: 867

Convection (forced) (cont'd)
at high velocities and temperatures, measurement of, 6: 1717(J)
mathematical analysis, in thermal entrance regions, 6: 4482
temperature distribution in high-pressure, 6: 3273(J)
Convection (free)
heat transfer, 6: 873(J)
heat transfer by, effect of direction of heat flow on, 6: 2363(R)
heat transfer by, theory, 6: 4048, 4049
rate of boiling of liquids under, 6: 872(J)
velocity, 6: 3775
velocity, theory of, 6: 4048, 4049
Conversion electrons
(See also appropriate subheadings under specific isotopes. See also Beta particles; Internal conversion.)
accompanying complex $\alpha$ decay, tracks in nuclear emulsions of, 6: 5510
angular correlations, in cascade processes, 6: 1844(J), 2171(J)
angular correlations, theory, 6: 3666
back scattering, 6: 2510(J)
directional correlation of successive, interference terms in, 6: 2176(J)
Doppler width of lines of, 6: 3721(J)
gamma energies from energies of, and critical x-ray absorption energies, 6: 2529
Coolants
(See Reactor coolants.)
Copper
absorption spectra in HCl, 6: 4735(J)
activation determination, 6: 3970(J)
annealing textures in rolled, 6: 1242(J)
bremsstrahlung reactions ($\gamma$,dp), cloud chamber identification of, 6: 1531
cathodic sputtering, 6: 252
corrosion, marine, 6: 5100(J)
corrosion by $H_2O_2$, 6: 240(J)
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
corrosion by water, 6: 4776(R)
creep under deuteron bombardment, 6: 893
crystal structure, 6: 6610(R)
determination by pile activation, 6: 549(J)
deuteron range-energy relation in, 6: 1032(J)
displaced atoms in deuteron-bombarded, 6: 3104
dynamic coefficients, 6: 245(J)
effects of deuteron bombardment on electric conductivity, 6: 2214(R)
effects of radiation on, bibliographies, 6: 5787(J)
effects of radiation on elastic constants, 6: 6475(J)
electric conductivity of, effect of elastic deformation in, 6: 241(J)
electrodeposition on Ti, 6: 2926
electrolytic determination in Ti and Ti alloys, 6: 3523
electrolytic separation and determination, 6: 1138(J)
electron scattering by, 6: 1035(J)
electroplating, 6: 599(R)
extinction in, 6: 605(J)
gamma absorption coefficients, experimental and theoretical, 6: 5217(J)
gamma absorption in, 6: 1533, 5456(R)
gamma reactions ($\gamma$,d) and ($\gamma$,p), ratio of deuterons to protons, 6: 4983(R)
gamma reactions ($\gamma$,n) at 320 and 160 Mev, 6: 1538
gamma reactions ($\gamma$,p), 6: 2487(J)
gamma reactions ($\gamma$,p), angular distribution, 6: 5201(J)
gamma reactions ($\gamma$,p) and ($\gamma$,d), 6: 1532
gamma scattering by, 6: 5899(J)
grain boundary diffusion of Zn in, 6: 5109(R), 6532
grain growth in, 6: 230
half-value-thickness for 200-kv x rays, 6: 6704(J)
heat exchange with liquid H and N, 6: 5593
heat of solution, 6: 4507(R)
heat of sublimation at absolute zero, 6: 5567
mechanical properties, 6: 6705(R)
meson scattering cross sections, 6: 319
meson total cross sections, 6: 4593
$\pi^-$ meson capture by, 6: 4166(J)
$\pi^-$-meson scattering cross sections, 6: 319
$\pi^-$-meson total cross sections, 6: 2730(J)
$\pi^0$ mesons from, by photon reactions, 6: 317
metabolism in Drosophila, 6: 1114
metabolism in Drosophila larvae, 6: 1982
neutron cross sections, 6: 1526
neutron inelastic-collision cross sections, 6: 5214
neutron scattering by, 6: 980
neutron scattering cross sections, 6: 1304(R), 3674
oxidation rate as function of temperature and pressure, 6: 896
penetrating cosmic showers in, 6: 1757(J)
proton bombardment of, distribution of products, 6: 360
proton bombardment of, formation of light nuclei by, 6: 700
proton elastic scattering cross sections, 6: 3422(J), 5692(R), 6179
Copper (cont'd)
proton reactions (p,$\pi$), cross sections, 6: 3825
radiation damage and recovery in, 6: 4978(R)
radiation damage distribution in deuteron-bombarded, 6: 2774(J)
rolling textures in, 6: 1245(J)
slip, nature of, 6: 5388(R)
stress-strain-time functions of, in simple monotonic tension, 6: 5363
thermal conductivity, measurement at high temperatures, 6: 2680
tissue distribution in Drosophila larvae, 6: 1595
vapor pressure between 1143 and 1292°K, 6: 5567
wettability by sodium silicates, 6: 4780
x-ray absorption by, 6: 3430(J)
x-ray spectra, 6: 5789(R)
Copper alloys
(See also Brass; Bronze.)
corrosion by $H_2O_2$, 6: 240(J)
corrosion by water, 6: 4776(R)
Copper–aluminum alloys
aging, x-ray diffraction study of, 6: 244(J)
annealing mechanism in, electron microscope studies of, 6: 2093(J)
grain-boundary diffusion, 6: 6610(R)
lattice-spacing relations in, 6: 6075(J)
plastic properties, 6: 5388(R)
stress and fatigue in, 6: 4510(J)
Copper–aluminum compounds (intermetallic)
crystal structure, 6: 827(J)
Copper–aluminum couples
thermoelectric power, 6: 3575(J)
Copper–aluminum–magnesium alloys
aging, x-ray diffraction study of, 6: 244(J)
constitution diagrams, 6: 243(J)
corrosion, marine, 6: 5100(J)
lattice-spacing relations in, 6: 6073(J)
Copper–beryllium alloys
effects of radiation on hardness and resistivity, bibliography, 6: 5787(J)
photometric analysis for Be, 6: 4736(J)
Copper–brass couples
intermetallic diffusion of, theory, 6: 2925
porosity, metallographic studies on, 6: 1474
Copper bromides
thermal capacity and thermodynamic properties from 16° to 300°K, 6: 4396
Copper–cadmium alloys
corrosion in various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
Copper chloride single crystals
nuclear magnetic resonance of protons in, 6: 4206(J), 5195(R)
Copper chlorides
catalysis of ascorbic acid oxidation by, 6: 803
Copper coatings
thickness measurements of, on cylinders by x-ray-diffraction analysis, 6: 1486
Copper complexes
chemical properties, 6: 4724(R)
with chloride, spectrophotometric studies of, 6: 5311(R)
with cyanide, in oxidation-reduction reactions, 6: 813
dissociation in aqueous solutions, 6: 564
equilibrium constants, 6: 535
with iodomercurates, structure and stability, 6: 4403(J)
with 2-methyl-8-quinolinol, stability, 6: 1141(J)
nuclear quadrupole resonance frequencies of Cu in, and bond structure, 6: 5466(J)
oxidation-reduction reactions in solution, mechanism, 6: 6529
spectrophotometric studies of, 6: 1393(R)
with tropolone and tropolone-derivative, formation constants of, 6: 6534
Copper compounds
chelation with $\beta$-diketones, 6: 1634
paramagnetic resonance and hfs of divalent, 6: 1847(J)
Copper electrodes
electric breakdown between, effect of surface treatment on, 6: 271
Copper–gold alloys
activity coefficients, 6: 2932(R)
corrosion in various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
effects of radiation on resistivity, bibliography, 6: 5787(J)
electric conductivity, effects of radiation on, 6: 493(J), 2771
ordering kinetics in, 6: 115, 4781
ordering rates in superlattice, effects of cold working, irradiation and heat on, 6: 3574
thermal diffusion in, 6: 5389(R)
Copper–gold compacts
radiation effects on intermetallic diffusion in, 6: 3783
Copper–gold compounds (intermetallic)
electric resistance and metallic diffusion in disordered, effect of neutron irradiation on, 6: 2520(J)

Copper–gold compounds (intermetallic) (cont'd)
order-disorder in, theory and kinetics of, 6: 4782
Copper–gold couples
radiation effects on intermetallic diffusion in, 6: 3783
Copper ions
inhibition of Ti corrosion by, 6: 588
self-consistent field calculation for $Cu^{+}$, 6: 4179(R), 6674(J)
Copper isotopes
mass, 6: 3054
Copper isotopes $Cu^{62}$
production in betatron, 6: 279(J)
Copper isotopes $Cu^{63}$
gamma cross sections, 6: 2167, 2464
gamma reactions ($\gamma$,n), 6: 1871(J), 2464
gamma reactions ($\gamma$,n), absolute cross sections for Li $\gamma$ radiation, 6: 6460(J)
gamma reactions ($\gamma$,n), cross sections, 6: 5881(J)
neutron activation cross sections, 6: 2168, 3391
nuclear electric moments, 6: 1309(J)
nuclear magnetic resonance absorption-line broadening in metal, 6: 6445(J)
nuclear quadrupole moments, 6: 5466(J)
photon reactions ($\gamma$,n), 6: 5877
proton reactions, (p,n), threshold determinations, 6: 5474(R)
triton reactions, 6: 705(J)
Copper isotopes $Cu^{64}$
beta spectra, 6: 3356
gamma-positron ratio, 6: 4260(J)
half lives, determination by automatic recording electroscope, 6: 5417(R)
internal conversion, 6: 3356
internal conversion in $Ni^{64}$ accompanying decay of, 6: 3868
Copper isotopes $Cu^{65}$
gamma cross sections ($\gamma$,$\alpha$), 6: 1012(J), 1861
gamma reactions ($\gamma$,n), 6: 1871(J)
mass, 6: 2989
neutron activation cross sections, 6: 2168
nuclear electric moments, 6: 1309(J)
nuclear magnetic resonance absorption-line broadening in metal, 6: 6445(J)
nuclear quadrupole moments, 6: 5466(J)
packing-fraction differences involving, mass-spectrographic measurement of, 6: 2991
proton reactions (p,n), threshold determinations, 6: 5474(R)
triton reactions, 6: 705(J)
Copper isotopes $Cu^{66}$
gamma spectra, 6: 1923(J)
half lives, determination by automatic recording electroscope, 6: 5417(R)
nuclear spin and decay, 6: 1051(J)
Copper–mercury couples
thermoelectric potential, 6: 5090(R)
Copper–nickel alloys
diffusion in, 6: 603(R), 5388(R)
Copper–nickel compacts
radiation effects on intermetallic diffusion in, 6: 3783
Copper–nickel couples
intermetallic diffusion of, theory, 6: 2925
porosity, metallographic studies on, 6: 1474
Copper–nickel–zinc alloys
casting, corrosion, and physical properties, 6: 1465
Copper oxides
nuclear quadrupole resonance frequencies of Cu in, and bond structure, 6: 5466(J)
Copper–silicon systems
plastic deformation, 6: 618(R)
Copper–silicon single crystals
plastic deformation of, 6: 1470(R), 4795(R), 5386(R)
x-ray-diffraction analysis, separation of cold work distortion and particle size broadening, 6: 6389
Copper–silver alloys
anisotropy of diffusion in grain boundaries, 6: 6610(R)
Copper single crystals
plastic deformation, 6: 618(R), 1470(R), 4795(R), 5386(R)
plastic flow in, 6: 603(R)
Copper sulfide–iron sulfide systems
electric conductivity from 1180 to 1300°C, 6: 5397(R)
electric conductivity of molten, 6: 2667(R)
Copper–tin alloys
(See also Bronze.)
phase studies, 6: 1238(R), 3787(R)
phase transformations in, 6: 600(R)
Copper–titanium alloys
constitution diagrams, 6: 4515(J)
phase studies, 6: 5603
Copper–uranium sandstone deposits (Utah)
occurrence, 6: 5778
Copper–zinc alloys
(See also Brass.)
diffusion in, 6: 603(R)
grain boundary diffusion in, 6: 1473(R)
Copper–zinc couples
diffusion of Zn in, 6: 601(R)
Copper–zirconium alloys
constitution diagrams, 6: 591(R), 4505(R)
Corn
(See Maize.)
Cornell Aeronautical Lab., Inc.
progress reports, 6: 2666(R)
Cornell Univ.
progress reports, 6: 108(R)
Corrosion
(See also appropriate subheadings under corroded materials and units and under corrosive agents; see also Electrochemical corrosion.)
book: Corrosion Guide, 6: 2371(J)
cathodic protection of steel in water, 6: 6040(J)
erosion-, methods for studying in metals and alloys, 6: 6038(J)
of metals and alloys, relation to microstructure, 6: 2076(J)
of metals by liquid metals, rate and nature of, 6: 6603
of metals by $O_2$, mechanism of, 6: 3281(J)
of metals by water, effects of temperature on, 6: 6046(J)
of metals by water, effects of velocity, 6: 6047(J)
method for evaluating rest results, 6: 4492
symposium on, minutes of, 6: 210
testing equipment, 6: 234, 4776(R)
Corrosion inhibitors
classification, 6: 2657
efficiency of Fe and Cu ions as, 6: 588
inorganic, for Ca, Fe, and Zn, 6: 3567
mechanism of, tracer techniques in study of, 6: 4518(J)
mechanism of action, 6: 2657
organic, applications and properties, 6: 6045(J)
phosphate-chromate, pitting and tuberculation effects, 6: 6043(J)
phosphate glasses, inhibition of galvanic attack of steel by, 6: 6041(J)
phosphate glasses, protective film formation by, 6: 6042(J)
properties of, for use on ball bearings, 6: 1218
for steam and condensate lines, 6: 6044(J)
Corrosive materials
magnetic pump for, 6: 5770
Corticosterone, desoxy-
effect on I tissue distribution, 6: 2276(J)
Corticotropin
effects on biological decay of thyroidal $I^{131}$, 6: 3950(J)
Cortisone
effects on biological decay of thyroidal $I^{131}$, 6: 3950(J)
effects on plasma sulfhydryl or protein levels, 6: 2246
effects on x-ray mortality in mice, 6: 6274(J)
negative effects on regeneration of blood-forming tissues following irradiation of rats, 6: 6279(J)
radiosensitivity effects on chicks, 6: 763
synthesis of radioactive, 6: 2056(J)
Cosmic deuterons
proportion of high-energy, at 3200 m altitude, 6: 6635(J)
Cosmic electrons
detection, counter arrangement for, 6: 924
energy, 6: 613(J)
energy spectrum, 6: 3376(J)
energy spectrum of, by absorption in Al and Pb, 6: 262(J)
energy spectrum of, in extensive showers, 6: 5128(J), 6632(J)
measurement of, multitelescope and hodoscope unit for, 6: 923
production in nuclear disintegrations, 6: 6629
radial distribution in extensive showers, 6: 6634(J)
scarcity of primary, 6: 927(J)
showers of, at high altitudes, 6: 2399(J)
Cosmic mesons
beta-stable, search for new, 6: 3373(J)
creation and termination of slow, in nuclear emulsions, 6: 2722(J)
decay of fast, 6: 3376(J)
differential energy spectrum of, at sea level, 6: 2962(J)
differential range intensity and momentum distribution, 6: 929(J)
distribution in high-energy showers, effect of nucleon-antinucleon production on, 6: 3598(J)
energy spectrum and production cross section of neutral, 6: 2967(J)
formation of two, in nuclear emulsions, 6: 5172(J)
high-energy multiple-production event at 4550 m, 6: 4842(J)
interactions in Pb underground, 6: 2114(J)
ionization by, in A at high pressure at sea level, 6: 6631(J)
ionization by relativistic, cloud-chamber measurements, 6: 5455(J)

Cosmic mesons (cont'd)
ionization of gas by, 6: 3377(J)
ionization spectra of, at sea level, 6: 3317(J)
ionizing power of penetrating, 6: 6637(J)
latitudinal variations in, 6: 2955(J)
masses, 6: 3318(J)
momentum and specific ionization, 6: 4537(J)
momentum spectra and formation, 6: 2391(J)
multiple and plural theories of production, solution of equations, 6: 5651(J)
multiple production, 6: 2960(J)
multiple production in nucleon-nucleon collisions, 6: 2453(J), 2454(J)
positive excess of, at 2000-m altitude, 6: 2958(J)
primary specific ionization, measurement of, 6: 3015(R)
production and energy distribution of $\pi$ and $\mu$, and relation to primary-nucleon spectrum, 6: 1762(J)
production and interaction at very high energies, 6: 5652(J)
production by primary protons, mechanism of, 6: 5804(J)
range and energy spectrum, 6: 2393(J)
ranges, ionization and mass of ~550 and ~1000 $m_e$ particles, 6: 6672(J)
scattering in Pb, coulomb and nuclear interactions in, 6: 6465
showers of, probability of production, 6: 926(J)
in showers with two and three maxima, 6: 2397(J)
zenithal variation, 6: 1299(J), 1763(J)
Cosmic mesons ($\kappa$)
decay and nuclear interaction, 6: 3311(J)
ratio of charged to neutral, underground, 6: 5412(J)
Cosmic mesons ($\kappa^-$)
star production by, in nuclear emulsions, 6: 5625(J)
Cosmic mesons ($\mu$)
capture in Pb, neutrons produced by, 6: 1759(J)
charge ratio, variation with momentum and altitude, 6: 5453
decay of, energy loss to neutrinos in, 6: 3314(J)
differential range spectrum at sea level, 6: 4813(J)
electromagnetic interaction of, burst-size-frequency distribution, 6: 6089(J)
high-energy, in upper atmosphere, 6: 5130(J)
intensity of, diurnal variation in, 6: 2688(J)
penetrating secondary radiation caused by, 6: 6380(J)
positive excess and east-west effect, 6: 4835(J)
positive excess at sea level, measurement, 6: 4830(J)
production spectrum in upper atmosphere, 6: 5624
response of anthracene crystals to, 6: 3010(J)
Cosmic mesons ($\pi$)
beryllium disintegration by, 6: 3374(J)
effect of photon production of, on extensive air showers, 6: 4826(J)
interactions in C, Pb, and paraffin, 6: 5405
ionization loss by relativistic, 6: 3022(J)
multiple production of neutral, in Pb, 6: 4906(J)
production cross section and frequency of neutral, technique for determining, 6: 6387(J)
production in Al and Pb at 4550 m, 6: 4907(J)
reactions of $\pi^-$ with $C^{12}$, 6: 4163(J)
star production by, statistical fluctuations in, 6: 6170(J)
Cosmic mesons ($\tau^-$)
star production by, in nuclear emulsions, 6: 5625(J)
Cosmic neutrons
carbon ($C^{14}$) production by, 6: 4101(J)
energy spectrum, variation with atmospheric depth, 6: 5127(J)
formation rate of $C^{14}$ by capture of, in N, 6: 2390, 3323(J)
intensity, altitudinal variation in, 6: 2111(J)
intensity, latitudinal variations in, 6: 268(J)
intensity, time and other variations in, 6: 2116(J)
intensity at mountain tops, correlation with ionization measurements at high altitudes and sea level, 6: 5798(J)
production of stars and single tracks by, in nuclear emulsions, 6: 1267(J)
production rates as function of atmospheric depth and energy of primary particle, 6: 4822(J)
production rates in nuclear emulsions by nuclear disintegrations, 6: 6629
properties and interactions of, review, 6: 3595(J)
reactions $O^{16}(n,3\alpha 2p3n)$ of 110-Mev, 6: 6384(J)
scattering in atmosphere, 6: 2956(J)
Cosmic particles
(See also headings by name, e.g., Cosmic electrons; see also Electrons; Mesons, etc.)
absorption in $H_2$ and C, 6: 260(J)
attenuation length in air of penetrating-shower-producing, 6: 6087(J)
charge on primary, 6: 1512
detection and measurement with Cherenkov radiation, 6: 4886(J)
detection by high-pressure cloud chamber at sea-level, 6: 6631(J)
differential scattering cross sections for penetrating, and mean square angle of scatter, 6: 2212(J)
electron–nuclear shower producing, disintegration of, 6: 263(J)
Cosmic particles (cont'd)
frequency of burst-producing, diurnal variation in, 6: 2112(J)
heavy, Geiger counters and Cherenkov light detector system for counting, 6: 5167(J)
heavy, tracks in nuclear emulsions, 6: 4817(J)
heavy primary, collisions in nuclear emulsions, 6: 4821(J)
high-energy disintegrations initiated in nuclear emulsions by primary, 6: 1761(J)
identification in nuclear emulsions, 6: 1289(J)
intensity, 6: 4529
ionization loss in nuclear emulsions, 6: 6630(J)
mass spectra at sea level, 6: 4530(J)
masses, 6: 3318
masses, identification of, 6: 2113(J)
mean free path in C and Pb of neutral penetrating-shower-producing, 6: 2686(J)
mean free path in C of relativistic, 6: 4827(J)
measurement by pulse ionization chamber, 6: 928(J)
multiple meson production by, in $H_2$, 6: 267(J)
neutral zeta particles in, existence of, 6: 2728(J)
nuclear-active, in extensive atmospheric showers, 6: 5801(J)
nuclear reactions in emulsions, 6: 5172(J)
pairs of penetrating, cross section for production underground, 6: 5412(J)
primary, collision mean free path in C, Fe, Pb, and paraffin, 6: 4824(J)
primary, composition of, 6: 4097(J)
primary low-energy, at high latitudes, 6: 4098(J)
production in cosmic ray nuclear disintegrations occurring in nuclear emulsions, analytical procedure for evaluation of, 6: 6629
scattering in heavy elements, effect on distribution, 6: 6385(J)
star production by, statistical fluctuations in, 6: 6170(J)
star production in AgCl by ionizing, 6: 1760(J)
unstable, cloud-chamber studies of, 6: 5404(R)
Cosmic protons
differential momentum spectrum at sea level, 6: 5411(J)
energy spectrum, variation with atmospheric depth, 6: 5127(J)
intensity and absorption length of high-energy, 6: 5130(J)
intensity in upper atmosphere, 6: 5624
ionizing power of penetrating, 6: 6637(J)
momentum distribution, 6: 269(J), 929(J)
momentum spectra, 6: 2391
primary, heavy meson production by interactions of, 6: 5173(J)
primary, intensity and absorption length in air, 6: 5404(R)
scattering in atmosphere, 6: 2956(J)
scattering in Pb, coulomb and nuclear interactions in, 6: 6465
star production by, in nuclear emulsions, 6: 611(J)
star production by primary, intensity and mechanism, 6: 5804(J)
Cosmic radiation
(See also specific particles identified with cosmic radiation, e.g., Cosmic neutrons.)
absorption and intensity of primary $\alpha$ particles, 6: 4816(J)
absorption in atmosphere, measurement of, 6: 1268(J)
absorption in Pb at balloon altitudes, 6: 2392(J)
absorption of neutron-producing, in Pb, 6: 2408(J)
absorption of nucleon component, in air, 6: 2401(J)
absorption of photons of, in Pb, Sn, Fe, Al, C, and paraffin, 6: 258(J)
absorption of star-producing, 6: 2405(J)
acceleration in galactic regions of intermediate particle density, relation to radio noise, 6: 5630(J)
albedo effect in, 6: 2964(J), 2965(J)
altitudinal variations of properties of, 6: 3319(J), 3387(R)
angular and radial spread of nucleon component, comparison with inelastic-collision differential cross sections, 6: 5629(J)
angular distribution and attenuation of star-producing component, 6: 5802(J)
angular distribution and east-west dissymmetry, 6: 4093(J)
angular distribution of energy of, 6: 3314(J)
associated penetrating particles of, underground, 6: 257(J)
azimuthal asymmetry at equator, 6: 6636(J)
azimuthal variation for zenith angle 40° at $\lambda$ = 19N, 6: 5631(J)
biological effects of, evaluation of present day knowledge, 6: 1596
book: Cloud Chamber Photographs of the Cosmic Radiation, 6: 5627(J)
book: Progress in Cosmic Ray Physics, 6: 5409(J)
book: Variations et origine du rayonnement cosmique, 6: 5410(J)
burst production in material of Z = 11 by, at sea level, 6: 2684
cascades in, photographic emulsion study of, 6: 1765(J)
counting of, a combinatorial problem in, 6: 615(J)
daily variation of, induced by weak magnetic disturbances, 6: 2398(J), 2407(J)
detection and measurement, review of work at Bartol Research Foundation, 6: 3387(R)
detection and measurement, spark counters for, 6: 969(J)
detection and measurement by coincidence telescope, 6: 2151(J)

Cosmic radiation (cont'd)
detection and measurement by triple coincidence telescope, 6: 4870(R)
detection and measurement with magnetic cloud chamber, 6: 2156(J)
distribution and energy spectrum in atmosphere, phenomenological theory, 6: 4820(J)
distribution in nuclear plates with fixed orientation with respect to the sun, 6: 6084(J)
diurnal variation of penetrating, 6: 4838(J)
dosage at high altitudes, 6: 497(R)
double stars produced by, detection by scintillation counters, 6: 4094(J)
east-west asymmetry of, equipment for measuring, 6: 610(R)
effects of solar activity on, 6: 1767(J)
effects of sunspot activity and earth's magnetic field on, 6: 2403(J)
electron production by, 6: 4535(J)
energy spectrum of nucleonic component, 6: 4831(J)
flux of soft, at high altitudes, 6: 2399(J)
galactic variation, 6: 3316(J)
gamma components, 6: 612(J)
hard component, east-west asymmetry of, 6: 3600(J)
hard component in upper atmosphere, 6: 5130(J)
hard component in upper atmosphere, separation into protons and μ mesons, 6: 5624
hard component spectra, at balloon altitudes, 6: 2585
high-energy interaction in, emulsion cloud chamber study of, 6: 925
high-energy primary flux of, detection and measurement, 6: 1489
hodoscope unit used in investigating, failure of neon lamps to strike, 6: 5816(J)
intensity at sea level, atmospheric effects on, 6: 5404(R)
intensity at sea level, increase during sand storms, 6: 6086(J)
intensity increases in, caused by meteoric activity, 6: 2966(J)
intensity of heavy primaries in, 6: 928(J)
intensity of high-energy, diurnal variation in, 6: 2688(J)
intensity variation with solar activity, 6: 6638(J)
interactions, emulsion cloud chamber observations of, 6: 4529
interactions of primary, near top of atmosphere, 6: 2404(J)
interactions with matter at great depths, 6: 5129(J)
interactions with nuclei, bibliography, 6: 5806(J)
investigation by high-pressure cloud chamber, 6: 6467(J)
ionization measurements at high altitudes and sea level, correlation with neutron intensities, 6: 5798(J)
ionization produced in air by, 6: 3320(J)
ionizing power at sea level, 6: 1764
latitudinal variations, 6: 3386(R), 3387(R)
latitudinal variations in intensity of, 6: 930(J)
mean free path of high-energy N component in C, S, and Fe, 6: 6090(J)
measurement of, design of parallel-plate counter for, 6: 2154(J)
meson-proton analysis, 6: 929(J)
μ-meson production by, underground, 6: 2683
narrow-angle pair of particles produced by, in $H_2$, 6: 5626(J)
neutral component, underground existence, 6: 5412(J)
non-ionizing penetrating-shower-producing, in water, 6: 5131(J)
north-south asymmetry at high latitudes, 6: 4095(J)
nuclear disintegrations caused by, energy distribution of particles emitted in, 6: 6162(J)
nuclear disintegrations caused by, features of, 6: 1766(J)
nuclear interactions in Pb, 6: 2685
nuclear reactions, producing S and V particles, 6: 6620(R)
nucleon scattering in high-energy collisions with nuclei, mean-square-angle calculations, 6: 5900(J)
nucleonic component, analysis based on neutron latitude variations, 6: 4822(J)
nucleonic component, angular and lateral distribution functions for, 6: 5799(J)
nucleonic component, development in atmosphere, 6: 5804(J)
nucleonic component at high altitudes, calculations, 6: 2963(J)
nucleonic component producing large bursts under thick shielding, 6: 4100(J)
origin, according to Li, Be, and B abundance in primary, 6: 5132(J)
origin, theory of, 6: 722(J), 927(J)
origin in hot stars, 6: 2396(J)
origin in solar or stellar disturbances, 6: 3593(J)
origin in stellar electromagnetic fields, 6: 2389(J)
penetrating non-ionizing component, 6: 614(J)
penetrating showers produced by, in Be, 6: 265(J)
penetrating showers produced by, in Pb and C, 6: 266(J)
photodisintegration of primary, by solar radiation, 6: 2402(J)
photon component, production of, 6: 4827(J)
photon component at sea level and 2000 m, 6: 4836(J)
primary, abundance of Li, Be, and B in, 6: 5132(J)
primary specific ionization in $H_2$, 6: 1758(J)
range and energy spectrum of penetrating particles in, 6: 2393(J)
Rossi curve of Pb, second, third, and fourth maxima, 6: 4833(J)
Rossi second and third maxima of, 6: 3312(J)
shower curve, second and third maxima in, 6: 6381(J)
solar, effect of earth's magnetic field on, 6: 2394(J)
solar component, 6: 2409(J)
spectrum of ionizing particles of, 6: 261(J)
spectrum of primary nucleons of, deduction from μ-meson spectrum, 6: 1762(J)
star production by, 6: 3387(R)
star production by, angular distribution of prongs, 6: 4834(J)
star production by, corrected rates of, 6: 6629
star production by, diurnal variation in rate of, 6: 1266(J)
star production by, in nuclear emulsions, 6: 259(J), 1819
star production by, nuclear emulsion study of, 6: 3602(J)
star production under graphite at high altitudes, rate of, 6: 4839(J)
star production under Pb and Al by, 6: 2961(J)
star-size distributions in nuclear emulsions, shape of, 6: 3313(J)
three-prong stars, mean energy in nuclear emulsion, 6: 6083(J)
three-prong stars produced by, angular-distribution analysis, 6: 4825(J)
transition effect of star-producing, 6: 1269(J)
two-prong stars produced by, discrimination in nuclear emulsions, 6: 4840(J)
underground, components and energy spectra, 6: 4819(J)
underground, effects of atmospheric temperature variation on, 6: 1756
underground, energy-depth relation, 6: 4900(J)
underground, κ-meson influence on, 6: 4534(J)
underground burst frequency, processes responsible for, 6: 4818(J)
zenithal distribution of nucleonic component of intermediate energy, 6: 5805(J)
zenithal variation, 6: 1763(J)
Cosmic-ray spectrometers
design, 6: 6637(J)
Cosmic showers
(See also Cascade showers.)
absolute vertical intensity, measurement with G-M telescope, 6: 4096(J)
absorption mean free path in air, determination, 6: 6382(J)
burst-size-frequency distribution in, 6: 6089(J)
cascade curve in heavy elements, calculation of, 6: 6383(J)
density, 6: 613(J)
density and energy distributions at cores of, 6: 2400(J)
density, distribution, and detection probabilities of, 6: 924
detection, effect of thin screens on, 6: 2395(J)
detection, radio telemetering in, 6: 1265(J)
detection and measurement, 6: 2954(R)
detection and measurement, cloud chamber for, 6: 962(R)
detection and measurement with cloud chambers, 6: 2957(J)
detection with scintillation detectors, 6: 5126(J)
diurnal variation of extensive, 6: 3592(J)
effect of photoproduction of π mesons on extensive, 6: 4826(J)
effect of scattering on form of cascade curve, 6: 6385(J)
electron-nuclear and extensive, generated in C and Pb, 6: 5801(J)
electron-nuclear process in, 6: 1270(J)
electron-photon, solution of fluctuation problem in, 6: 4823(J)
electron-photon cascade equations, solution, 6: 4814(J)
electrons in, energy spectrum of, 6: 6632(J)
energy, 6: 4529
energy dependence of angular distribution and pion emission in, calculation using Fermi model, 6: 3598(J)
energy spectrum of electrons in extensive, 6: 5128(J)
energy spectrum of soft nonequilibrial component, 6: 6386(J)
hard and soft particles in, ratio of, 6: 5406(J)
high-energy, structure of region near core of, 6: 5404(R)
high-energy nucleonic cascade theory, 6: 4828(J)
high-energy-proton-induced, heavy mesons in, 6: 5173(J)
intensity, 6: 4529
ionization loss in nuclear emulsions, 6: 6630(J)
lateral spread in air and Pb, 6: 2687
lateral structure of extensive, 6: 4841(J)
meson production and angular distribution in, 6: 3597(J)
$\zeta^0$ mesons in, search for, 6: 4896
multiple meson production in penetrating, 6: 4829(J)
multiplicity of secondaries in, variation with energy of primary, 6: 4815(J)
nuclear-cascade process in, 6: 3594(J)
nuclear cascade process in extensive, theory of, 6: 3315(J), 3321(J)
in nuclear emulsions, associated pairs of particles in, 6: 4533(J)
nucleonic component of extensive, angular and lateral spread, 6: 6088(J)
penetrating, altitude variation, 6: 6087(J)
penetrating, association of bursts with, 6: 4099(J)
penetrating, energy spectra and interactions of pions in, 6: 5405
penetrating, multiplicities from C, H, and $H_2O$, 6: 6085(J)
penetrating, originating in C, Pb, Fe, and paraffin, 6: 4824(J)
penetrating, production in water by non-ionizing radiation, 6: 5131(J)
penetrating component, latitude effect on intensity, 6: 6382(J)
penetrating particles in extensive, relation to development phase, 6: 5803(J)
penetrating secondary, caused by μ mesons, 6: 6380(J)

Cosmic showers (cont'd)
photon component in extensive, 6: 4837(J)
photons and electrons in, numbers of, 6: 616(J)
production, probability of, 6: 926(J)
production as result of high energy nucleon collisions, 6: 3854(R)
production by high-energy primaries, 6: 2404(J)
production with two and three maxima in their Rossi curves, 6: 2397(J)
production of extensive, by photodisintegration of primaries, 6: 2402(J)
production of penetrating, in Cu, 6: 1757(J)
radial distribution of electrons in extensive, 6: 6634(J)
ratio of penetrating particles to electrons in, 6: 270(J)
Rossi curves, position and pressure dependence of 3rd and 4th maxima, 6: 6082(J)
structure function, 6: 3601(J)
temperature effect, 6: 2115(J)
transition curve for electronic, 6: 2959(J)
Cosmology
origin of the elements, polyneutron theory of, 6: 5125(J)
Counters
(See Coincidence circuits; Radiation detection instruments; and Radiation detectors.)
Counting devices
(See also Radiation detection instruments; Radiation detectors.)
automatic, for recording activity of many samples, 6: 5838(J)
cold cathode discharge tubes for use as, design, 6: 4561(R)
for cosmic radiation, 6: 969(J)
electromagnetic, design of, 6: 487(P)
gated decade circuit for, 6: 6649
performance, 6: 5417(R)
velocity selector for, 6: 4143
Couples (metallurgy)
(See also headings for specific couples by name of components.)
porosity, metallographic studies on, 6: 1474
Creatinephosphoric acid
fluorimetric analysis, 6: 1134
Creep
(See also as subheading under specific materials.)
correlation of, by diffusion analogy, 6: 6076(J)
effects on grain structure of $\alpha$ solid solutions of Al and its alloys, 6: 4783
measurement in Cu, Ge, and Si, equipment for, 6: 6705(R)
testing of, instrumentation for, 6: 192
theory of, in metals, 6: 2021
Cristobalite
structure, neutron and x-ray diffraction study of, 6: 2102
Criticality studies
(Studies of mass, dimensions, etc., for nuclear critical assemblies; see also criticality studies under specific reactors and under Reactors; also specific fissionable isotopes.)
critical radius of a system containing H and fissionable material, calculation, 6: 3072
formula for safe mass in a reactor, 6: 354
Cross sections
(See also as subheading under specific isotopes; see also main headings by name of radiation, e.g., Neutron cross sections.)
methods of measurement of relative, 6: 3111(J)
relativistic corrections of nucleon nucleon scattering, 6: 3058(J)
scattering, for arbitrary-spin particles, theory, 6: 4288(J)
variational calculation, 6: 3094(J)
Crotonaldehyde
synthesis of labeled, 6: 174(J)
Cryogenics, 6: 1750(R), 4085(R)
bibliographies on, 6: 1484, 5795(J)
book: Low Temperature Physics, 6: 5617(J)
degeneracy theorem of Kramers applied to, 6: 2682(J)
monograph on, 6: 1484
optical cell for use in, 6: 5794(J)
production of low temperatures by demagnetization, 6: 255(J)
progress reports on, from Ohio State Univ., 6: 3299(R)
reduction of heat-leak losses, 6: 3666
thermometers for use in, 6: 1280(J)
Cryolite
cryoscopy of, in fused $LiBO_2$, 6: 3223(J)
infrared spectrum and crystal structure, 6: 1667(J)
Cryolite–sodium fluoride systems
cryoscopy in eutectic, 6: 3221(J)
Crystal detectors
(See also Scintillation detectors.)
with cadmium sulfate crystal, for clinical use, 6: 6669(J)
design, 6: 1506(R)
diamond $\alpha$-particle, effect of light on counting rate, 6: 4162(J)
fluorescent efficiencies of, and peak height measurements with, 6: 2134
for in vivo use, 6: 657(R)
Crystal detectors (cont'd)
packing of NaI(Tl) crystals for, 6: 2431
properties and operation, 6: 3645(J)
radiosensitivity of alkali-halide crystals, 6: 5432(J)
Crystal structure
(Including crystal imperfections, lattice distortion, crystal deformation, orientation, superlattices, etc.; see also as subheading under specific materials; see also appropriate subheadings under specific materials.)
determination, use of low temperatures in, 6: 5807
determination from neutron diffraction data, 6: 619(J)
effects of $\alpha$ particles on, 6: 4007(J)
effects on neutron transmission, 6: 1341
hydrogen isotope effect on, 6: 550(J)
measurement at low temperatures, 6: 617
neutron-diffraction determination in single crystals, 6: 6091
x-ray-diffraction analysis, separation of cold work distortion and particle size broadening, 6: 6389
Crystallography
(See also as subheading under specific materials.)
crystallite size determinations with Geiger-counter spectrometers, influence of apparatus function, 6: 5413(J)
Crystals
(See also specific materials and subheadings covering crystal phenomena; and main headings by material, e.g., Copper crystals; see also Bi-crystals; Single crystals.)
coupling of electron and nuclear motions in, theory, 6: 3454(J)
electron energy levels, theory, 6: 6674(R)
energy bands in, calculations, 6: 4179(R)
energy bands in, soluble problem in quantum theory of, 6: 4675
growth factors, 6: 5996
hydrogen isotope effect on bonds in, 6: 550(J)
neutron scattering and absorption by, 6: 3663(J)
neutron scattering by, multi-oscillator processes in, 6: 4234(J)
neutron scattering by, theory, 6: 2503
plastic deformation of, theory, 6: 1660
potential functions, matrix element calculations of, 6: 3252(J)
preparation, crystallizer for, 6: 4738(J)
slow-neutron refraction and diffraction in, theory, 6: 5222(J)
theory of, 1-electron approximation in, 6: 2166(R)
thermokinetic models for magnetism, solid friction and plastic flow of, 6: 3325
Curare alkaloids
synthesis of labeled, 6: 570(J)
Curium
absence in nature, reason for, 6: 2059(J)
ion exchange separation by cyclotron bombardment techniques, 6: 4563
oxidation states, 6: 2634
separation from Am, 6: 2634
Curium isotopes
formation, 6: 917
formation by cyclotron bombardment, and half lives, 6: 4563
Curium isotopes $Cm^{238}$
identification by nuclear-emulsion techniques, 6: 5914
Curium isotopes $Cm^{240}$
decay schemes, 6: 917
half lives, 6: 6628
spontaneous fission, 6: 4222, 6628
Curium isotopes $Cm^{241}$
electron capture, 6: 917
Curium isotopes $Cm^{242}$
alpha emission of, measurement, 6: 1481
alpha spectra, 6: 415
alpha spectra, measurement of, 6: 2775
decay schemes, 6: 917
Curium isotopes $Cm^{244}$
spontaneous fission, 6: 4222
Current integrators
(See also Electrometers; Radiation detection instruments (ion current type).)
design, 6: 1278(R)
Current regulators
(See also Voltage regulators.)
for beta spectrometers, 6: 5135
direct current to alternating current signal converter, 6: 4336(P)
electronic, use in stabilization of magnet current, 6: 3616(J)
Cyanide complexes
with cadmium, polarographic study of, 6: 5311(R)
with copper, in oxidation-reduction reactions, 6: 813
Cyanide ion complexes
electron transfer process and redox reactions of, in aqueous solution, 6: 3220

Cyanide ions
effect on isotopic exchange between valence states of Hg, 6: 2621
exchange studies, kinetics of, 6: 1123(J)
Cyanides
exchange reactions with thiocyanate ions, 6: 87
fluorination, 6: 134(J)
radiosensitivity effects, 6: 51(J), 520(R)
Cyanogen bromide
microwave spectrum, 6: 4282(J)
nuclear electric quadrupole resonance of $N^{14}$ in, 6: 3057(J)
Cyanogen iodide
nuclear electric quadrupole resonance of $N^{14}$ in, 6: 3057(J)
Cyanomolybdate complexes
charge transfer between $K_4Mo(CN)_8$ and $K_3Mo(CN)_8$, 6: 5356
Cyclobutane, 1,2-dichloro-1,2,3,3,4,4-hexafluoro-
infrared absorption spectra, 6: 4757(J)
Cyclobutene, hexafluoro-
reactions with aliphatic tertiary amines, 6: 2866(J)
reactions with 1-butanethiol, 6: 1160(J)
reactions with isoquinoline and 3-methylisoquinoline, 6: 2868(J)
reactions with pyridine, 6: 2867(J)
1,3-Cyclohexadiene
deuteration and disproportionation, 6: 2615(J)
1,4-Cyclohexadiene
deuteration and disproportionation, 6: 2615(J)
Cyclohexane
chemical effects of α particles on, 6: 1421(J)
decomposition of, Hg-photosensitized, 6: 2858
deuteration and disproportionation, 6: 2615(J)
radiolysis of, effect of I in, 6: 1674
Cyclohexane, chloroundecafluoro-
preparation, 6: 3994(J)
Cyclohexane, decafluorobis(trifluoromethyl-)
infrared absorption analysis, 6: 3768
Cyclohexane, γ-hexachloro-
effects of x radiation on, in alcoholic solution, 6: 1169
Cyclohexane, hexadecafluorodimethyl-
(See Cyclohexane, decafluorobis(trifluoromethyl-).)
Cyclohexane, phenyl-
internal absorption of fluorescent light in, 6: 5647(J)
Cyclohexane, undecafluoro-
preparation, 6: 3994(J)
Cyclohexanol
deuteration and disproportionation, 6: 2615(J)
Cyclohexene
chemical effects of α particles on, 6: 1421(J)
deuteration and disproportionation, 6: 2615(J)
Cyclohexene, perfluoro-
preparation of, and Br and Cl addition products, 6: 3994(J)
Cyclone precipitators
design, 6: 5615
efficiency, effect of dust concentration on, 6: 189(J)
particle motion in, 6: 5615
Cyclopentane
decomposition of, Hg-photosensitized, 6: 2858
Cyclopentane, decafluoro-
physical properties, 6: 5327
Cyclopentane, methyl-
decomposition of, Hg-photosensitized, 6: 2858
Cyclopropane
decomposition of, Hg-photosensitized, 6: 2858
Cyclotrons
(See also Synchrocyclotrons.)
acceleration of multiply charged nuclei in, 6: 379, 5207(J)
American, bibliography and notes on a tour of, 6: 1024
beam collimation, 6: 1328(J)
beam deflection in, regenerative, 6: 1336(J)
beam distribution between dees, 6: 3580(R)
beam energy and energy distribution on internal target, photographic and Cu activation method for measurement of, 6: 6689
beam focusing, with a wedge-shaped non-uniform magnetic field, 6: 4637
beam snouting arrangement for, 6: 4961
bibliography on 60-in. Crocker, 6: 2499
centrifugal-pump liquid target assembly for, design, 6: 4562
circulating system for T in, 6: 2197
dees erosion in, 6: 3580(R)
design and rebuilding of Univ. of Mich. 42-in., 6: 3855
differential analyzer for orbit problems in, 6: 2448
dissociation of $H_2^+$ in, 6: 4639(J)
instrumentation and operation, bibliography, 6: 5889(J)
magnet coils, oxidation of cooling oil in, 6: 5482(J)
magnetic fields of, focusing of charged particles by, 6: 4637
Cyclotrons (cont'd)
magnetic fields of, stabilization, 6: 1542(J)
neutron-production targets for 184-in., 6: 4618
at Nobel Institute for Physics, Stockholm, design, 6: 2760(J)
operation and performance, 6: 3386(R)
operation of 60 in., 6: 1821(R), 5454(R)
orbit problems in, 6: 378, 1821(R)
oscillator design for Argonne 60-in., 6: 1324
oscillators for, 6: 5657(R)
particle distribution in beams, radioautographic determination of, 6: 3693
proton beams at internal target, energy distribution of, 6: 4966
radiofrequency system for Berkeley 60-in., 6: 5683
safety procedures with regard to fire, accident, and radiation, 6: 5484(J)
shielded scattering laboratory for use with, design and equipment, 6: 6461(R)
shielding, for personnel protection, 6: 5011
spatial distribution of current on internal targets of, 6: 6462
target assembly for bombardment of liquids, 6: 5211(J)
temperature reduction of, by cleaning magnet heat exchanger, 6: 278(R)
theory of fixed frequency, 6: 1882
therapeutic uses of deuteron beam and α particles from, 6: 3194(J)
trochoidal orbits in, 6: 1025(J)
at Univ. of Birmingham (England), general description, 6: 3416(J)
at Univ. of Washington, design and construction of 60-in., 6: 3087
x-ray measurement on dee r-f voltage, 6: 6690(J)
Cylinders
heat emission by, in liquids and gases, 6: 1202(J)
heat transfer in infinitely long concentric, theory, 6: 869
heat transfer in laminar region of air flow around, 6: 4767
heat transfer in split hollow, 6: 1710
horizontal, natural convection heating and cooling by, 6: 2363(R), 2364(R)
thermal stresses and deformations in, 6: 3289(J)
transient temperature and thermal stress in infinitely long, 6: 870
Cysteine
dosage determinations and effects of, as protective agent against radiation injuries in chicks, 6: 2564
effects of γ radiation on aqueous, 6: 4008(J)
effects of radiation on, 6: 2042, 2888(J)
effects of sulfite on irradiated solution of, 6: 2042
effects on radiosensitivity of tumor cells, 6: 1608
effects on survival of irradiated rabbit thymocytes, 6: 2563
effects on uptake of $P^{32}$ by rat and mouse tissues, 6: 2562
prophylactic uses in radiation injury, 6: 5716(R)
protective effects against x-ray cataracts, 6: 2270(J)
protective effects in neutron inactivation of enzymes, 6: 3916(J)
radiosensitivity effects, 6: 520(R), 1379(R), 1386(J), 4690(R), 5553
radiosensitivity effects in combination with ascorbic acid, 6: 3495(J)
radiosensitivity effects on rabbit thymocytes, 6: 3487
therapeutic uses in radiation injury, 6: 4357(R)
Cystine
biosynthesis of $S^{35}$-labeled, by E. coli, 6: 2349(J)
effects of radiation on aqueous, 6: 2888(J)
formation and oxidation, 6: 2042
$S^{35}$ activity in, following pile irradiation, 6: 3534(J)
synthesis of $S^{35}$-labeled, 6: 4453(J)
Cytobiology
tracer studies, review, 6: 3943(J)
Cytochemistry
application of, in analysis of elements by x-rays, 6: 1101(J)
Cytogenetics
binucleate cell formation in grasshopper's spermatocytes, cinematography of, 6: 5714
Cytology
effects of incubation, x radiation, adrenal cortex hormones, and an oxidation-reduction dye on normal and malignant lymphocytes, in vivo study, 6: 6259(J)
spectrophotometric methods for study of the cell nucleus, 6: 1374
Cytoplasm
analysis for ribonucleotides, 6: 112(J)


## D


David Sarnoff Research Center
progress report on electronic devices for nuclear physics, 6: 6396(R)
Decarboxylation
(See also as subheading under appropriate organic compounds.)
of malonic and bromomalonic acids, isotope effects in, 6: 5299, 5729
Decay series
mathematical analysis, 6: 5475

Decay series (thorium)
radiometric properties, 6: 5920(J)
Decay series (neptunium)
occurrence in nature, 6: 2059(J), 3811
Decontamination
(See also as subheading under units and materials decontaminated; also as unit operation under specific chemical processes; for studies on the use of special coatings to aid decontamination see also Coatings and specific coatings, e.g., Paint and Silicone coatings; see also Radioactive contamination.)
handbook on, for laboratories, 6: 4374(J)
of surfaces, 6: 469(P)
Dehydrogenases
activity in the pea plant, 6: 2803
preparation and properties of a glucose-6-phosphate dehydrogenase from L. mesenteroides, 6: 5930
Densitometers
for field use, design and performance of, 6: 4868(R)
Density
(Including specific gravity; see also as subheading under specific materials.)
measurement by gamma absorption, 6: 937
DePaul Univ.
progress report on scintillation techniques applied to electron energy studies, 6: 6413(R)
Detonation waves
spinning, experimental investigation of, 6: 4522
Deuteration
of cholesterol and ergosterol, 6: 2614(J)
Deuterium
(See also Deuterons.)
bibliography, 6: 5997
concentration in solar atmosphere, 6: 3978(J)
concentration in steam wells, Larderello, Italy, 6: 4741(J), 4742(J)
determination by 5 methods, 6: 822(J)
determination in organic compounds, 6: 104
deuteron and triton cross sections, 6: 1859
deuteron cross sections, 6: 1528
deuteron elastic scattering cross sections, 6: 5213
deuteron reactions, theory of polarization of products, 6: 5480(J)
deuteron reactions (d,n), energy of, 6: 2193(J)
deuteron reactions (d,n), neutron polarization in, 6: 5180(J)
deuteron reactions (d,p), cross section and angular distribution, 6: 4203(J)
deuteron scattering by and deuteron reactions (d,p) of, 6: 1330(J)
diffusion coefficients in, 6: 4565(J)
dissociation by high-energy $\gamma$ rays, 6: 703
effects on solvolytic reactions, 6: 1533
equilibrium in exchange of, between $NH_3$ and HD, 6: 3241
exchange between $D_2O$ and heptane, 6: 122(J)
fast protons from neutron scattering by, 6: 3424(J)
gamma cross sections, 6: 1863
gamma cross sections for processes not involving pion production, theory, 6: 5471
gamma reactions, calculated cross sections for emission, 6: 4950(J)
gamma reactions ($\gamma$,n), yield and energy of neutrons from, 6: 1829
gamma reactions ($\gamma$,n)p, at high energies, 6: 4947
gamma reactions ($\gamma$,n)p, cross sections as function of $\gamma$ energy, 6: 4949(J)
gamma reactions ($\gamma$,p), 6: 680(R)
gamma reactions ($\gamma,\pi^0$), 6: 4899(J)
gamma reactions ($\gamma,\pi$), theory, 6: 3654(J)
helium nucleus reactions ($He^3$,p), cross sections, 6: 5474(R)
hyperfine structure, mass corrections to, 6: 5186(J)
incorporation into cholesterol in hen's eggs, 6: 6344(J)
infrared absorption in, pressure-induced, 6: 2318(J)
ionic reactions in, mass-spectrographic study of, 6: 2423(J)
isotopic chemical effects on methyl halides, 6: 5341(J)
isotopic effects in chromic acid oxidation of isopropyl alcohol, 6: 5733(J)
isotopic effects in reactions of ethyl diazoacetate, 6: 4400
isotopic exchange between ethanol and water, 6: 6551
isotopic exchange with ammonia, 6: 4416
mass spectrographic determination in H-D mixtures, 6: 547
meson reactions ($\pi^-$,2n$\gamma$), calculation of n-n interaction from $\gamma$ spectra, 6: 4617
meson scattering by, theory, 6: 3038(J)
meson total cross sections, 6: 2724(J)
$\pi$ meson scattering cross sections, 6: 1818
$\pi^0$ mesons from, by photon reactions, 6: 975
$\pi^0$ mesons from, by proton reactions, 6: 670, 973
$\pi^-$ mesons from, by photon reactions, 6: 321, 323, 671, 1005, 2162
$\pi^+$ mesons from, by photon reactions, 6: 2727(J)
Deuterium (cont'd)
$\pi^+$ mesons from, by proton reactions, 6: 2458(J)
$\pi^+$ mesons produced by $\gamma$ reactions in, cross sections and $\pi^-/\pi^+$ ratio, 6: 4902(J)
$\pi^+$-meson reactions, 6: 3648
$\pi^+$-meson total cross sections, 6: 4216(J)
microspectroscopy of glow discharges from, 6: 4418
molecular, nuclear r-f spectra in high and low magnetic fields, 6: 5465(J)
molecular spectra, 6: 3127
molecular volume, 6: 2025(J)
neutron absorption cross sections, 6: 3671
neutron capture by, radiation emitted in, 6: 2202(J)
neutron inelastic scattering by, 6: 1031(J)
neutron reactions (n,p), 6: 361, 716
neutron scattering by, 6: 2207(J)
neutron scattering by, theory, 6: 720(J)
neutron scattering cross sections, 6: 2585
neutron total cross sections, 6: 1525, 5486(R)
nuclear magnetic moments, 6: 995(J)
nuclear momentum distribution in, inferred from proton scattering, 6: 1841
nucleon momentum distributions in, from proton scattering data, 6: 5464(J)
photodisintegration, 6: 702, 1861, 2448, 2498
photodisintegration, as indicator of odd-state noncentral forces, 6: 2190(J)
photodisintegration cross section of, and angular distribution of photoprotons from, 6: 1020(J)
photon reactions ($\gamma,\pi$), 6: 3030(J)
photon reactions ($\gamma,\pi^0$), cross section calculations, 6: 6134
pickup process in, 6: 687
polarizability of molecular, 6: 3242(J)
production by electrolysis of heavy water, 6: 828(J)
production of thermo-nuclear reaction in, by high current spark discharge, 6: 1867(J)
proton elastic scattering by, impulse approximation, 6: 1896(J)
proton elastic scattering cross sections, 6: 5212
proton reactions (p,$\gamma$), plane polarized $\gamma$ rays from, 6: 4636(J)
proton reactions (p,n), energy spectra, 6: 4618
proton reactions (p,$\pi$), 6: 4897
proton reactions (p,$\pi$), ratio of positive to negative mesons produced, 6: 6626
proton scattering by, pick-up process in, 6: 4966
proton scattering cross sections, 6: 1887
proton spectra, 6: 1821(R)
protons scattered from, energy spectra of, 6: 388, 1753
radiometric determination, 6: 1628
ranges of fission products in, 6: 2504
reaction with $NH_2$, catalysis on metal films, 6: 5998(J)
reaction with ethyl radicals, 6: 2877(J)
reaction with methyl radicals, 6: 3529(J)
reaction with U, 6: 3347(J)
reaction with U metal, kinetics of, 6: 573
spectra, 6: 2895(R)
spectrophotometric determination in body water, 6: 5830(R)
targets of, preparation, 6: 2759
theory of molecular, in magnetic fields, 6: 1828(J)
triton cross sections, 6: 1528
triton cross sections, in range 80- to 1200-kev tritons, 6: 3676
triton reactions (t,n), 6: 3676, 5474(R)
uptake into proteins of fertilized and unfertilized A. punctulata eggs suspended in heavy water, 6: 2807(J)
Deuterium compounds
properties, bibliography on, 6: 4417, 5325, 5326, 6552
self-diffusion coefficients in deuterated water, benzene, bromoethane, and ethanol, 6: 3977(J)
vibration frequencies of, rules for, 6: 1417(J)
Deuterium hydrides
interactions between nuclear spins in, 6: 2172(J)
magnetic-moment ratio between protons and deuterons in, 6: 2750(J)
molecular spectra, 6: 3127
nuclear magnetic resonance, spin-spin interaction in, 6: 6439
reaction with U, 6: 3347(J)
reaction with U metal, kinetics of, 6: 573
spectra, 6: 2895(R)
Deuterium–hydrogen systems
isotope separation in transition region between Knudsen and Poiseuille flows, 6: 5638(J)
mass spectrographic analysis, 6: 547
thermal diffusion in gaseous, 6: 2413(J)
Deuterium iodides
(See Hydriodic acid-d.)

Deuterium ions
mobility in $D_2O$, 6: 5058(J)
Deuterium oxides
(See Water-d; Water-$d_2$; Water-dt.)
Deuterium tritides
spectra, 6: 2895(R)
Deuterium–water systems
exchange reactions in, γ-ray induced, 6: 556
Deuteron scattering cross sections
theory, 6: 1547
Deuterons
coulomb scattering, mathematical analysis, 6: 6472(J)
effective range of triplet n-p interaction in, from photodisintegration cross sections, 6: 3851(J)
effects on semiconductors, 6: 557(J)
electric and magnetic moments, theory, 6: 4189(J)
electrodisintegration by fast electrons, theory, 6: 6174(J)
emission in photonuclear reactions, effect of polarization on, 6: 4224(J)
energy loss in $D_2O$ ice, 6: 5500(J)
exchange collisions with fast nucleons, 6: 3690(J)
exchange-current effects in, 6: 4215(J)
formation by pick-up process in proton scattering, 6: 4966
ground state, 6: 4212(J)
ground state, range of tensor forces for, 6: 4200(J)
inactivation of dry penicillin by, 6: 6263(J)
inactivation of urease by, 6: 6329(J)
inelastic scattering, 6: 1888(J)
magnetic-moment ratio between protons and, 6: 2750(J)
mass differences involving, from nuclear reaction energies, 6: 2753
meson production from, by photo processes, 6: 3651(J)
meson reactions ($\pi^+$,2p), 6: 328(J), 329(J)
π-meson capture by, 6: 4178(J)
$\pi^-$-meson reactions, formation of γ quanta and neutral π mesons in, 6: 6429(J)
neutron and proton scattering by phase-shift analysis of experimental data, 6: 4643(J)
neutron scattering by, effects of tensor forces on, 6: 4645(J)
neutron scattering by phase-shift analysis of experimental data, 6: 4644(J)
neutron scattering by, theory, 6: 2508(J)
nuclear forces in, 6: 1346(J)
nuclear reactions, angular distribution of particles emitted in, 6: 4201(J)
nuclear reactions (d,p) and (d,n), Born approximation theory of, 6: 5670
nuclear reactions (d,pγ), angular correlations in, 6: 6686
nucleon magnetic moments in, nonadditivity, 6: 6147(J)
pathological and hematological effects of single whole-body exposure to 190-Mev, 6: 2263(J)
photodisintegration, 6: 1013(J), 3081(J), 3669(J)
photodisintegration, angular distribution of protons in, 6: 1539(J), 3852(J)
photodisintegration, meson-exchange contribution, 6: 4084(R)
photodisintegration cross sections, 6: 3850(J)
photo-dissociation by high energy γ-rays, 6: 1866
physical properties and isodose curves of, in therapeutic uses, 6: 3194(J)
polarization of neutrons from D-D reactions, 6: 4185(J)
production in neutron-nuclei collision, mechanism and total cross sections, 6: 6169(J)
proton elastic scattering, analysis at 190 Mev, 6: 6697
proton reactions (p,πt), 6: 4084, 5791
proton scattering by, 6: 2508(J), 3386(R)
ranges in metals and semiconductors, 6: 1032(J)
reactions of, stripping theory of, 6: 1859
relativistic equation for ground state of, using scalar mesons and scalar coupling, 6: 1937(J)
relativistic pseudoscalar meson theory of, 6: 747(J)
response of scintillation crystals to, 6: 966(J)
scattering by deuterons, theory, 6: 3092(J)
scattering by hydrogen, 6: 717
scattering by protons, 6: 2946
triton reactions (t,αn), theory, 6: 6624(R)
triton reactions (t,n) for incident T having energies in range 80–1200 kev, 6: 3390
virtual levels, theory, 6: 5182(J)
Dextran
biosynthesis of labeled, 6: 163, 568, 763
metabolism, 6: 4691(R)
Dextrins
from tapioca, nutritional value as a blood plasma substitute, 6: 1617
Dextrose
(See Glucose.)
Diabetes
effects of alloxan, on distribution of phosphate between plasma and acid soluble P compounds of liver, 6: 3203
glomerulosclerosis in, 6: 1074
Dialysis
apparatus for increasing speed of, of small quantities of fluids, 6: 4352(R)
Diamonds
(See also Crystal detectors.)
as alpha-particle detectors, effect of light on counting rate, 6: 4162(J)
atomic scattering factor in, anisotropy of, 6: 4541(J)
correlation of counting properties with optical properties of, 6: 1294(J)
crystal structure and electric properties, 6: 967(J)
electrical counting response to β particles, 6: 5444(J), 5445(J)
point-contact rectification in, 6: 4804(R)
specific heat, 6: 2932(R)
texture of radiation counting, as found from divergent beam x-ray photographs, 6: 4102(J)
thermodynamic properties, 6: 1239(R)
ultraviolet transmission limit, correlation with counting properties, 6: 5444(J), 5445(J)
wave functions, 6: 4179(R)
Diazo compounds
acid-catalyzed reactions, mechanism, 6: 4400
Dibenzanthracene
effects of radiation on chemical properties, 6: 1170(J)
Diborane
(See Boron hydrides.)
Diborane, amino-
molecular structure, 6: 136
Diborane, bromo-
molecular structure, 6: 136
Diborane, 1,1-dimethyl-
molecular structure, 6: 136
Diborane, dimethylamino-
molecular structure, 6: 136
Diborane, tetramethyl-
molecular structure, 6: 136
Dielectric constants
measurement of, for liquid and solids in the frequency range 3 cps to $5 \times 10^{11}$ cps, 6: 3297
Dielectrics
(See also appropriate subheadings under specific materials; see also Electric insulators.)
current induced in, by electron bombardment, measurement of, 6: 1350(J)
Diet
effects on extent of radiation injuries, 6: 5019(J)
fasting and forced feeding following whole-body x irradiation, 6: 3173(J)
Differential analyzers
(See Computers.)
Differential thermal analysis
bibliographies, 6: 3230
equipment for, 6: 3286
tungsten-molybdenum thermocouple for, 6: 1259(J)
Differentiating circuits
gated decade, design, 6: 6649
Diffraction gratings
performance, effect of error run on, 6: 4280
Diffusion
(See also as subheading under diffused materials and radiations; see also Bonding; Gaseous diffusion process; Grain-boundary diffusion; Permeability; Self-diffusion; Thermal diffusion.)
in binary alloys, equation of, 6: 1244(J)
through an interface, solution of equation for, 6: 800
intermetallic, radiation effects on, 6: 3783
mathematical analysis, 6: 756, 953, 1442
meteorological aspects, 6: 757, 979
of micelles in colloids, measurement of, 6: 5566
tracer studies, bibliography, 6: 5763(J)
in turbulent flow, solution of equations for, 6: 6349(J)
Diketones
(See also Ketones.)
chelation of Ba, Cu, and Ni compounds by β, 6: 1634
chelation of β, effect of salt anions and of solvents on, 6: 1994
chelation of divalent metals by β, 6: 1993
dissociation constants of β, in water-dioxane solutions, 6: 1633
extraction of Zr and Hf by β, 6: 4015
luminescence spectra of Sm and Eu complexes of β, 6: 3539(J)
synthesis, acid catalysts for, 6: 5985
Dilatometers
design and operation of, and dial gage for, 6: 2084
development and operation of differential transformers for use as a sensitive element of, 6: 1780
Dineutrons
stable, search for, 6: 6432
Dioxane
fluorescence of, α- or γ-induced, 6: 653(R)

Dipole moments
(See Magnetic moments; Nuclear magnetic moments.)
Disaccharides
ion exchange, 6: 148
Distillation apparatus
(See also Evaporators.)
for diffusion-pump oil, design, 6: 880(J)
for hydrogen isotopes, Stedman packing in, 6: 2988(J)
for solids, 6: 5062
vertical rotating rectification column, design, 6: 6335(J)
Dithizone
absorptive properties of, in colorimetric determination of metals, 6: 4733
Dodecylamine
adsorption on hematite, 6: 4497(R)
Dodecylamine acetate
adsorption on hematite, 6: 2073(R), 3294(R), 5368(R)
chemical properties, 6: 4497(R)
Dogs
radiation sickness in, symptoms and development, 6: 5028(J)
radiosensitivity, 6: 520(R)
Dosimeters
(See Radiation detection instruments; Rate meters.)
Dosimetry
(See appropriate subheadings under radiations and materials.)
Dow Chemical Co.
progress reports, 6: 228(R), 903(R), 2379(R)
Drosophila
autosomal lethals in, induced by x-radiation, 6: 8
barium and La metabolism in, 6: 503
beta-particle dosage determinations in $P^{32}$-labeled, 6: 5937
copper metabolism in larvae of, 6: 1114
effects of 50-kev, 180-kev, and 21-Mev x radiation on pupae development, 6: 6509(J)
effects of radiation on adaptive values in populations of, 6: 5546
effects of radiation on gene mutations and chromosome aberrations in, 6: 5717
effects of x radiation and electrons on eggs of, 6: 2266(J)
effects of x radiation on pupa development, 6: 2265(J)
fluorescence in, as related genetically and biochemically to red eye pigment, 6: 767(J)
gynandromorphs in, induced by x radiation, 6: 773(J)
mineral metabolism in, 6: 1982
mutations induced by $P^{32}$ in adult male, 6: 5939
mutations induced by x radiation in, 6: 770(J)
mutations produced by indirect effects of x irradiation on, 6: 6266(J)
pathological effects of alkali metal ions on development, 6: 5964
sexual behavior in, heritable individual differences, 6: 6237
sterility and recessive lethal mutation following x irradiation of female, 6: 5263
viability, effects of recessive lethal factors on, 6: 2556
viability, effects of x radiation on, 6: 1951(J)
Drugs
(See also drugs by action, e.g., Antihistamine drugs; also specific drugs, e.g., Rutin.)
preservation by irradiation, 6: 2356(R)
sterilization by irradiation, 6: 2253(R), 2330(J)
sterilization by irradiation, prevention of side effects, 6: 5271
Dry batteries
filler composition for, for increasing voltage stability and recoverability, 6: 6222(P)
Zamboni type, design, 6: 1279(R), 1789(J)
Dry boxes
filter for, 6: 5814
Duke Univ.
progress reports, 6: 4424(R)
progress reports on microwave research, 6: 2345(R), 3379(R), 3380(R) 3383(R), 5855(R)
Durohydroquinone
exchange reactions with duroquinone in buffered methanol solution, 6: 6530
Duroquinone
exchange reactions with durohydroquinone in buffered methanol solution, 6: 6530
Dusts
(See also Aerosols; Particles; Powders.)
effects on turbulence of gas streams, 6: 189(J)
gravimetric determination of atmospheric, with membrane filters, 6: 6023(J)
mass concentration determination of air-borne, 6: 2908(J)
rate and efficiency of clearance of inhaled, by respiratory tract, 6: 3158
sampling equipment for, 6: 657(R)
spectrographic analysis for Be in air, 6: 3757
Dutch–Norwegian heavy water reactor
(See JEEP reactor.)
Dyes
(See also specific dyes, e.g., Toluidine blue; see also classes of dyes, e.g., Phenazine dyes and Thiazine dyes.)
antispasmodic effects on ileum and uterus, 6: 4343
in plastics, effects of radiation on electronic processes in, 6: 835(J)
Dynamics
(See Mechanics.)
Dynamite Mine (Colorado)
uraniferous clays in, occurrence and analysis of, 6: 1458
Dysprosium
dilatometric and magnetic behavior from −195 to 300°C, 6: 5584(J)
preparation by reduction of chloride or fluoride with Ca in Ta container, 6: 3763
Dysprosium isotopes
alpha emission from, 6: 410
Dysprosium isotopes $Dy^{160}$
half life of excited state of, 6: 2220(J)
internal conversion coefficients, 6: 1555, 2223(J)
isomers, 6: 1555
Dysprosium isotopes $Dy^{165}$
half life, 6: 4658
isomeric transition, 6: 409
low-energy γ transitions in, 6: 2522

## E

Earth
age estimations, 6: 922(J), 1755(J)
age estimations by radioactivity methods, 6: 5371(J)
exhalation of Rn from, 6: 6482(J)
internal heat distribution from radioactivity in, 6: 6361(J)
radioactivity in, distribution of, 6: 2789(J)
radioactivity in, proportions of U, Th, and $K^{40}$ in, 6: 6360(J)
Egg yolks
chromatographic analysis of normal and x-irradiated, 6: 508
Eggs
(See also Embryos.)
effects of radiation on Ascardia galli, 6: 4367(J)
effects of radiation on respiration and development of, 6: 1084
effects of radiation on sea urchin, 6: 3486
effects of x radiation and electrons on Drosophila, 6: 2266(J)
radioactive, degradation of yolk glycerol in, 6: 2578
radiosensitivity of dry and soaked Artemia, and effects of age on radiosensitivity of salmon, 6: 5933(R)
Elasticity
(See also elastic properties under specific materials.)
effects of radiation on, theory, 6: 5225(J)
mathematical analysis, 6: 2943
of metals, determination by ultrasonic pulse technique, 6: 2103
response of yielding vibratory system to transient forcing functions, 6: 2676
Elastomers
(See also Rubber.)
fluorinated, preparation of, 6: 5747(R)
fluorinated, preparation and evaluation of, 6: 2322(R)
fluorinated, preparation and evaluation of oil-resistant, for use at low temperature, 6: 1701(R)
physical and shielding properties, 6: 442
shielding properties, 6: 3126(R)
Electric arcs
(See also Gaseous ionization.)
characteristics of high-current, in A, He, and their mixtures, 6: 4806(J)
control of electron current in, 6: 932(J)
for crossed discharge, design, 6: 620
electrode-stabilized, calculations for discharge, 6: 4544(J)
energy balance equation for positive columns of, 6: 4106(J)
mercury, energy distributions and radial potential variations in, 6: 4843
minimum pressure to sustain stable, in longitudinal magnetic fields, 6: 6093
plasma-sheath equation for, continous solution of, 6: 2121
potentials producing, measurement, 6: 4107(J)
relations for positive columns of, 6: 4105(J)
self-magnetic field in, 6: 1274(J)
shape of, in noble gas high-pressure dishcarge, 6: 6392(J)
sparking and x rays in a Hg-pumped vacuum system, 6: 5808
spectra and temperature of high-voltage, in air, 6: 4104(J)
theory of, 6: 1768
wave theory and electron scattering in, 6: 4546(J)
Electric condensers
testing, 6: 5417(R)

Electric conductivity
(See also Superconductivity)
apparatus for measuring interfacial resistance between liquid and solid metal surface, 6: 4483
effects of deuteron bombardment on, in Cu, Au, and Ag, 6: 2214(R)
thermo-resistivity unit for measurement of, design, 6: 2084
Electric control systems
for use during irradiation, design of, 6: 1281(J)
Electric currents
measurement of small discharges, electronic device for, 6: 1577(P)
recording devices for, design, 6: 1281(J)
Electric discharge
(See also Electric arcs; Glow discharges.)
electrodeless H-discharge tube, design, 6: 4545(J)
energies of positive ions in negative point-to-plane corona in $N_2$, 6: 6097(J)
in gases, mathematical theory of, 6: 3611(J)
high-frequency breakdown of gases, theory, 6: 5414(J)
strata in, formation in relation to pressure, 6: 6391(J)
theory of plasma with varying current strength, 6: 6390(J)
Electric fields
(See also Electromagnetic fields; Electrostatic fields; Magnetic fields.)
effective length of electrostatic analyzer with "rounded" corners, derivation of formula for, 6: 6647
effects on heat transfer in liquids, 6: 1203(J)
measurement by three methods, 6: 4082
measurement in a linear accelerator, 6: 377
Electric furnaces
(See Furnaces; Induction furnaces; Resistance furnaces.)
Electric generators
(See also Electrostatic generators; Pulse generators.)
cascade, using h-f for filament supply of kenotrons, 6: 6464(J)
design, 6: 3470(P)
Electric insulators
(See also Dielectric constants.)
effects of radiation on, bibliography, 6: 5694
high resistivities in, equipment for measurement, 6: 2974(R)
resistance of, apparatus for measuring, 6: 5639(R)
testing, oscillograph for, 6: 6225(P)
Electric power
(Generation and transmission, excluding aspects normally associated with instruments.)
measurement for induction heating, 6: 1448(R)
Electric resistance
(See Electric conductivity.)
Electric resistors
(See Resistors.)
Electric switchgear
design of triggered gap, 6: 5636
Electrical noise
(See Noise.)
Electrochemical analysis
(See also as subheading under materials analyzed; see also Polarographic analysis.)
efficiency of micro-Hg cathode in, 6: 1648
Electrochemical corrosion
(See also as subheading under specific materials.)
polarization effects on, mathematical analysis of, 6: 4060
Electrochemistry
kinetics of ionic recombination in, 6: 1996
Electrochromatography
(See also Chromatography.)
apparatus for separation of mixtures by, 6: 1135
separation of rare earths by, 6: 6570
Electrodes
(See also headings by names of materials, e.g., Graphite electrodes; see also Cathodes.)
particle exchange between metallic, in high vacuum, 6: 1393(R)
polarization and potentials, in electrolytic cells, 6: 3806
for welding of thick plates and pressure vessels, 6: 6021
Electrodynamics
conference on dynamics of ionized media, University Coll., London, England, April 1951, proceedings, 6: 1752
Electrolytes
(See also Nonelectrolytes.)
activity coefficients of mixed aqueous, from vapor pressure, 6: 5730
distribution and excretion following acute whole-body irradiation, 6: 2292(J)
secretion in pancreas, 6: 3884
Electrolytic cells
mass transfer in, 6: 3806
theory, 6: 3806
for zirconium production from $K_2ZrF_6$, design, 6: 6364(R)
Electrolytic ions
isotope fractionation by hydration of, 6: 5822(J)
Electromagnetic fields
expansions in loss-free cavities excited through holes, 6: 4611
interactions with electrons, one-body relativistic Dirac equation for, 6: 4676
motion of relativistic electron in, 6: 4549(J)
paths of ions in, 6: 3699(J)
theory, generalized to include case of self-energy not equal to zero, 6: 1366(J)
Electromagnetic lenses
air core, design, 6: 3332
aperture-type, focal properties and spherical aberration, 6: 5811(J)
with axial field $H(0,z) = \gamma/z^n$, spherical aberration in, 6: 5812(J)
ion concentration in plasma of, through Ne and A, 6: 6096(J)
low-pressure, ion concentration and recombination in, 6: 6092(J)
low pressure, positive He ions in the afterglow of, 6: 4543
low-pressure, radio frequency oscillations in, 6: 4108(J)
measurement of discharge admittance and electron density, 6: 6095(J)
metal transfer in non-sparking, in high vacuum, 6: 2120
probe measurements in, reliability, 6: 6094(J)
sparking potentials in transverse magnetic field, 6: 5809(J)
electron intensities in, wave-mechanical calculation of, 6: 3587(J)
electron trajectories in, calculation of, 6: 4110(J), 5133(J), 6643(J)
first and second derivatives of induction on axis of revolution, measurement, 6: 6399(J)
geometry of focal surfaces of, with and without diaphragms, 6: 3586(J)
mathematical model, 454(J), 4130(J)
third-order-aberration, design, 6: 3588(J)
Electromagnetic pumps
design, 6: 3556(R)
for liquid metals, design and performance of a-c, 6: 5365
for liquid metals, design and performance of d-c, 6: 5364
operation and analysis of a 100-psi, 6: 2653(J)
unipolar generator for, design of 100-KW, 6: 4853(R)
vibration analysis in range 5 to 120 cps, 6: 3778
Electromagnetic waves
(See also specific radiations, e.g., Infrared radiation; Gamma radiation.)
frequency multiplication by reflection from electron cloud moving with relativistic velocity, 6: 4963(J)
Electrometers
(See also Electron tubes; Radiation detection instruments (ion current type).)
design, 6: 1(R)
direct reading, for small currents, 6: 6651(J)
for measuring ionizing radiation by high frequency variation, 6: 6512(R)
for measuring voltage loss in pocket ionization chambers, 6: 3635(J)
for photoconductivity measurements, design, 6: 6412
for pocket chambers, 6: 1581(P)
for small currents, 6: 282(J)
theory of generalized mechanical, 6: 5633
Electron beams
aberration in electrostatic field, theory of, 6: 3700(J)
classical electron radiation in, experimental evidence for, 6: 2989
dispersion in gases, 6: 4547(J)
energy in a linear accelerator, 6: 713
focusing, 6: 476(P)
frequency multiplication of electromagnetic waves by reflection from, 6: 4963(J)
mathematical analysis of factors causing disturbances in, 6: 1770
measurement of gas density with, 6: 2507(J)
molecular fission of hydrocarbons by, 6: 836(J)
production of flat, application to mass spectrometry, 6: 4586(J)
scattering by foils, 6: 725(J)
shadow cast by, on fluorescent screen exposed to flood beam of electrons, 6: 6099(J)
space charge and virtual cathode in, 6: 3415(J)
sterilization of food and drugs with, 6: 5720(J)
x-ray production by, bibliography, 6: 5892(J)
Electron capture
(See also under specific materials.)
Sargent diagram for, for the actinide elements, 6: 5522(J)
transition energy for, 6: 3712
Electron-diffraction analysis
(See also as subheading under specific materials.)
bibliographies, 6: 1273(J)
measurement of electron diffraction intensities, 6: 108(R)
of molecular structure of B compounds, 6: 5065
Electron microscopes
danger of exposure to x rays from, 6: 783(J)
electron source modification for control of beam current in, 6: 5887
external control of spacing of projector pole-piece elements, 6: 6650

Electron microscopes (cont'd)
external objective aperture centering and interchanging device for, ◊: 5418
power supplies for, device for monitoring stability of, ◊: 5419
revolving specimen stage for, ◊: 1500
Electron microscopy
applied to study of fatigue failures in Al, Fe, and brass, ◊: 2663
applied to study of spermatogenesis in rats, ◊: 2560
microtome for tissue sectioning for, design, ◊: 4700(R)
ultra-thin tissue sections for, ◊: 766(J)
ultra-thin tissue sections for, technique for preparation of, ◊: 5534
Electron pairs
(See also appropriate subheadings under Electrons.)
annihilation in flight at 200 Mev, ◊: 5454(R)
calibration of nuclear emulsions using, from $Be^8$ γ rays, ◊: 1807(J)
detection and measurement, ◊: 655
from deuteron bombardment of $B^{10}$, ◊: 1009(J)
formation, ◊: 1861
formation by γ absorption in Pb and U, ◊: 1543
gamma spectra from annihilation of, ◊: 6627
internal formation of, coefficients for, ◊: 5234(J)
narrow-angle, from π-meson interactions in nuclear emulsions, ◊: 5655(J)
production by electrons, division of energy in, ◊: 5632(J)
production by mesons, ◊: 673(J)
production by mesons, photograph, ◊: 5632(J)
production by x radiation, ◊: 402(J)
production cross section for high γ energies, calculation assuming Hartree atomic model, ◊: 5687(J)
production in Al, Ag, Au, and Th foils, ◊: 4967(J)
production in limit of high relativistic energies, differential cross section for, ◊: 5190(J)
production in limit of high relativistic energies, integral cross section for, ◊: 5191(J)
Electron scattering cross sections
measurement by electron sensitive nuclear emulsions, ◊: 1030
Electron showers
in lead, Monte Carlo study of, ◊: 3816(J)
Electron sources
(See also Beta sources.)
for control of beam current in electron microscope, ◊: 5887
electrostatic focusing electron gun, design and construction, ◊: 6653(J)
Electron tubes
(See also Cathode-ray tubes.)
6BN6 gated beam tube, use as fast coincidence circuit, ◊: 5818(J)
cold-cathode thyratrons, design of, ◊: 1779
frequency controller for, ◊: 1785(J)
grid for, design of, ◊: 3480(P)
interaction of modes in magnetron oscillators, ◊: 2973
microphonic effects in, methods and instruments for measurements of, ◊: 2435
for microwave generation, design of, ◊: 1782(R)
testing, ◊: 5417(R), 5789(R)
theory, ◊: 5789(R)
Electrona Corp.
progress reports, ◊: 4871(R)
Electronic equipment
(See also specific equipment.)
handbook on standard, ◊: 2976
printed circuit conductors for use in, production and testing, ◊: 5416
Electronic filters
mathematical analysis of, ◊: 2979
Electronic relays
circuit design, ◊: 4326(P)
Electrons
(For electrons from nuclear sources see also Beta particles; see also Auger electrons; Conversion electrons; Cosmic electrons; Leptons; Positrons.)
absorption by Pb, ◊: 395(J)
acceleration system for, design, ◊: 6413(R)
anomalous magnetic moment of, theory, ◊: 1054(J)
Auger, detection of, ◊: 2150(J)
axial motion in constant-wave-velocity section of linear accelerator, ◊: 5485(J)
binding energies for, tables, ◊: 3065(J)
binding energy in alkali metal, ◊: 4526(J)
bound, calculation of coherent scattering of γ rays by, ◊: 5693(J)
capture and loss of, by protons passing through air, ◊: 1905(J)
capture by molecules, probability measurements, ◊: 4653(J)
charge-symmetrical interaction between nucleons and, ◊: 2234(J)
classical electron radiation, experimental evidence for, ◊: 2989
collision probability of slow, in gases, ◊: 1490
collisions with atoms, theory of, ◊: 2765(J), 3429(J)
Electrons (cont'd)
collisions with positrons, ◊: 4548(J)
detection by nuclear emulsions in mass spectroscopy, ◊: 6627
diamagnetism of free, ◊: 1772(J)
diffraction, Boron approximation of, ◊: 5065
Dirac's classical theory of, comparison with projective theory of relativity, ◊: 5810(J)
discrete energy loss of 35- to 50-Kev, by interaction with atoms and molecules, ◊: 6468(J)
dosage determinations of, using photographic film, ◊: 3639(J)
drift velocity in argon-alcohol mixtures, ◊: 3013(J)
effects of scattering of, on bremsstrahlung in thin anticathodes, ◊: 1890(J)
effects of scattering of, on spatial distribution of x-ray bremsstrahlung, ◊: 1889(J)
effects on cotton seed germination and sterilization, ◊: 2815(J)
effects on Drosophila eggs, ◊: 2266(J)
effects on electric conductivity of CdS crystals, ◊: 2044(J)
effects on photographic film, ◊: 3535(J)
effects on semi-conductors, ◊: 557(J)
elastic scattering of, effect of finite size of nucleus on, ◊: 1904(J)
electron-pair production by, division of energy in, ◊: 5632(J)
emission by Pt, Mo, Be, and Cu, dependence on bombarding isotope mass, ◊: 2421(J)
emission by tungsten and oxide-coated cathodes, ◊: 4085(R)
emission of, due to γ rays, ◊: 404(J)
emission of, due to photon absorption, ◊: 5685
emission of secondary, from metals under positive-ion bombardment, ◊: 2690(J)
energy loss in a proportional counter, ◊: 393(J)
energy loss in thin layers, theory, ◊: 1891(J)
energy loss per ion pair formed in gases, ◊: 2122(J), 5716(R), 6183(J)
exchange scattering by atoms and inverse Auger effect, theory, ◊: 6098(J)
excitation of atomic H by, distorted wave treatment of, ◊: 4651(J)
excitation of He atoms by, calculation of cross section, ◊: 6175(J)
excitation of nuclei by fast, theory, ◊: 6174(J)
Fermi-type interactions, ◊: 4923(J), 4999(J)
Fermi-type interactions and selection rules, ◊: 5005(J)
gamma scattering by bound, calculations, ◊: 6185(J)
grain density in tracks of, moving at relativistic velocities in photographic emulsions, ◊: 4149(J)
inelastic scattering in metals, exchange effects, ◊: 3703(J)
interactions, ◊: 681(J)
interactions, short-range, ◊: 1861
interactions in heavy atoms, ◊: 3606(J)
interactions in nuclear emulsions, ◊: 3423(J)
interactions with fields, theory, ◊: 3140(J), 3451(J)
interactions with neutrons, ◊: 6676(J)
interactions with neutrons, comparison of phenomenological and meson-theory predictions, ◊: 5859(J)
interactions with neutrons, theory, ◊: 1832(J), 3877
interactions with neutrons in pseudoscalar meson theory, ◊: 4183(J)
interactions with one-dimensional quantized electromagnetic field, ◊: 6101(J)
interactions with own radiation field, ◊: 1365(J)
interactions with polarization and convection currents of neutrons, ◊: 4184(J)
interactions with positrons, integro-differential equation for Green's function, ◊: 5922(J)
intrinsic moment of, effect on spectroscopic isotope shift, ◊: 3129(J)
ionization by, ◊: 1263(J)
ionization loss of, ◊: 5503
K-capture of, transition energy determination for, ◊: 2224(J)
magnetic behavior of large systems of, ◊: 3607(J)
mass stability of, in linear generalizations of classical electrodynamics, ◊: 4289(J)
migration velocity in A and A-N mixtures, ◊: 4885(J)
models of, ◊: 4846(J)
motion in electric and magnetic fields, analytical solutions, ◊: 6100(J)
motion in linear accelerators, ◊: 2502(J)
motion in a periodically varying spatially uniform magnetic field, ◊: 3387(R)
motion of relativistic, in electromagnetic fields, ◊: 4549(J)
multiple coulomb scattering in nuclear emulsions, ◊: 1550(J)
multiple scattering, theory, ◊: 1902(J), 3701(J), 5502(J)
multiple scattering in celluloid, Al, Ag, and Au foils, ◊: 5502(J)
multiple scattering in nuclear emulsions, ◊: 1293(J), 5224(J)
oxidation of ferrous sulfate by, ◊: 2629(J)
path length in foils, ◊: 725(J)
polarization by polarized γ rays, ◊: 1014(J)
polarization in Compton scattering, ◊: 5898(J)
polymerization of organic compounds by, ◊: 141(J)

**Electrons (cont'd)**
positron scattering by, in He, 6: 5492(J)
production by cosmic radiation, 6: 4535(J)
quantum theory of, 6: 2239(J)
radiation from, in a magnetic field, 6: 918
radiation from, in synchrotrons, 6: 2498, 3328(J)
radiation loss by, moving in large orbits, 6: 4844(J)
radiation scattering by, 6: 1034(J)
radiative correction to the Coulomb scattering of, 6: 2514(J)
radiative correction to form and breadth of emission line, 6: 6485(J)
radiative correction to scattering of, by nuclei, 6: 1545
radius of, in subtractive field theory, 6: 2238(J)
range distribution of fast, theory, 6: 3863(J)
range-energy curve of slow, in nuclear emulsion, 6: 4976(J)
range-energy relation in Al, 6: 3608(J)
range-energy relation in nuclear emulsions, 6: 1295(J)
recoil effect on electron-proton forces and inapplicability of energy law, 6: 3137(J)
response of scintillation crystals to, 6: 966(J)
scattering, 6: 1818, 1821(R)
scattering by A, 6: 401(J)
scattering by electrons, 6: 917, 3423(J)
scattering by electrons in nylon, 6: 1037(J)
scattering by electrons in photographic emulsions, 6: 390
scattering by gold and Be, 6: 1036(J)
scattering by H, theory, 6: 719(J)
scattering by H and He, Oppenheimer approximation, 6: 4972(J)
scattering by nuclear emulsions, 6: 661(J)
scattering by nuclei, higher Born approximations in theory of, 6: 4647(J)
scattering by point and extended nuclei, phase shift between partial waves, 6: 5498(J)
scattering by silver, Al, Au, C, and Cu, 6: 1035(J)
scattering from point singularities in metals, theory, 6: 5903(J)
scattering in coulomb field, recoil correction to bremsstrahlung cross section, 6: 5901(J)
scattering in plasma, theory, 6: 4546(J)
scattering of fast by light nuclei, dependence of intensity on scattering angle, 6: 6181(J)
Schrödinger's equation for, moving in a periodic potential, 6: 4675
secondary, effective atomic numbers for $\gamma$-induced emission of, 6: 5223(J)
self-energy and radiation corrections, 6: 4680(J)
single scattering at large angles, dependence on nuclear charge of scatterer, 6: 3862(J)
single scattering by Al, Ni, Ag, and Au foils, 6: 5220(J)
single scattering of fast, at small angles, 6: 4646(J)
spectra of secondary, produced by $Co^{60}$ $\gamma$ rays in water, 6: 4244(J)
stopping power of, calculation with screened coulomb interaction, 6: 4550(J)
stress tensor of, 6: 4845(J)
theory of, 6: 4109(J)
theory of, simplified classical, 6: 621(J)
three-photon annihilation of, triple-coincidence technique for study of, 6: 4918
three-quantum annihilation of, 6: 1771
track recognition in nuclear emulsions, 6: 6633(J)
trajectories of, in transgaussian region of elliptical electrostatic fields, 6: 283(J)
trajectory tracer for, in electrostatic field, automatic, 6: 6645(J)
trajectory tracing of paraxial, in electrostatic lenses, 6: 6644(J)
transmission through thin dielectric foils, hysteresis effect in, 6: 4968(J)
x-ray absorption line width, calculation with screened coulomb interaction, 6: 4550(J)

**Electroplating**
(See also appropriate subheadings under base materials; also headings by materials of coating, e.g., Nickel coatings; see also Electrochemical analysis; Electrochemistry.)
electronic control system for, 6: 1578(P)
voltage regulator for control of, 6: 1777

**Electroscopes**
(See Radiation detection instruments.)

**Electrostatic analyzers**
effective length of, determination, 6: 6647
focusing of, theory, 6: 280(J)

**Electrostatic fields**
(See also Electric fields; Electromagnetic fields.)
electron trajectories in, automatic tracer for, 6: 6645(J)

**Electrostatic generators**
(See also Van de Graaff generators.)
cascade, using h-f for filament supply of kenotrons, 6: 6464(J)
design, 6: 1586(P), 1884(J)
high intensity pulsed ion source for, design, 6: 3694
operation, 6: 3412(R)
operation at ONR, 6: 5456(R)

**Electrostatic lenses**
paraxial electron trajectories in, use of transformation tables in tracing, 6: 6644(J)
transgaussian region of elliptical, theory, 6: 283(J)

**Electrostatic precipitators**
evaluation of, on a radiochemical process off-gas system, 6: 1092
for monitoring fission gases, design of, 6: 482(P)
portable, for atmospheric dust sampling, 6: 6022(J)
for sampling aerosols in high-velocity air streams, 6: 5403

**Electrostatic separation**
bibliographies, 6: 1423

**Elementary particles**
(See also specific particles, e.g., Mesons($\pi$).)
classical model of, 6: 452(J)
counting of, by using Cherenkov radiation, 6: 4583(J)
creation by thermal oscillation of fields, 6: 5528(J)
electromagnetic properties of spin-$\frac{1}{2}$, 6: 4283
intrinsic parity limitations, 6: 6488(J)
quantization of theory of spinning, 6: 1933(J)
relation of field theory and action at a distance for, 6: 5525(J)
relativistic integral equations for scattering and bound states of two particles, 6: 6206(J)
relativistic quantum mechanics of, 6: 4286(J)
scattering by complex nuclei, generalization of the impulse-approximation method, 6: 5904(J)
scattering theory, 6: 4648(J)
spinning, spinors in theory of, 6: 4998(J)

**Elements**
age estimations of, 6: 922(J)
cytochemical analysis of, in biological samples, 6: 1101(J)
formation in universe, 6: 1754
heavy, limits of stability of, 6: 2174(J)
origin, polyneutron theory of, 6: 5125(J)
spectrographic determination of isotopic composition of, 6: 1573(P)
volatilization rate in He d-c arc spectroscopy, 6: 2607(J)

**Elephants**
leukocyte count of, 6: 510(R)

**Emanation**
(See Radon.)

**Embryonic tissues**
radiosensitivity effect of suspensions of, 6: 763

**Embryos**
ages of mouse and human, table and graph for estimating equivalent, 6: 3149
effects of radiation on chick, 6: 4357(R)
effects of radiation on nucleic acid synthesis in chick, 6: 4694(R)
indirect effects of x radiation on wall of developing mesencephalon of chick, 6: 5274(J)
iodine distribution in chick, 6: 2283
radiosensitivity, 6: 2572(J)
x-ray lethal dosage determinations for chick, 6: 4694(R)

**Emission spectra**
(See also appropriate subheadings under materials and main headings by name of radiation, e.g., Neutron spectra.)
isotope shift in, explanation for, 6: 3069(J)
isotope shift in, review, 6: 3398(J)

**Emissivity**
methods of measurement for carbon and graphite, 6: 3559

**Enanthic acid, $\alpha$-bromo-**
polarographic behavior, 6: 538

**Engineering Research Inst., Univ. of Mich.**
progress reports, 6: 916(R), 2356(R), 4247(R)

**Engines**
(See Aircraft engines; Gas turbine engines; Internal combustion engines; Turbines.)

**Eniwetok Atoll**
ecology of, following atomic bomb explosion, 6: 3159
radioactivity in biological samples and sand from, 6: 5933(R)
radiobiological survey, 6: 5934(R)

**Enriched reactors**
(See also specific reactors using enriched fuel; also general headings, e.g., Breeder reactors.)
design, 6: 1323

**Entomology**
(See also Insects.)
tracer applications in field of, 6: 4723(J)

**Enzymes**
(See also specific enzymes.)
effects of cyclophorase-mitochondrial system of rabbit liver on fatty acid oxidation, 6: 6491

Enzymes (cont'd)
effects of glucose-6-phosphate dehydrogenase on glucose metabolism in L. mesenteroides, 6: 5930
effects of radiation on, 6: 916(R), 2557(R), 3895(R), 4352(R), 4353(R)
effects of radiation on alkaline phosphatase, 5-nucleotidase, and adenosine triphosphatase activity, 6: 5550(R)
effects of radiation on fibrinolytic, 6: 4701
effects of radiation on formation and inactivation of, 6: 4692(R)
effects of tributyl phosphate on, 5: 3199
effects of x radiation on, in mouse spleen, 6: 6247(J)
formation of, effects of radiation on, 6: 2565
in hydrolysis of crystalline metaphosphates, 6: 2833
inactivation by oxidized fatty acids, 6: 1590
inactivation by radiation, 6: 40(J)
inactivation by ultraviolet light, 6: 4437
inactivation of dry fumaric hydratase by neutrons, 6: 3900(J)
inactivation of fumaric hydratase and thiaminase by neutrons, x rays, and Ra radiation, 6: 3899(J)
inactivation of fumaric hydratase, serum phosphatase, and cholinesterase by neutrons, 6: 3898(J)
inhibitor complexes of, thermodynamic studies, 6: 1945
mineral uptake by, 6: 1982
preparation from mitochondria of animal tissues, 6: 5980
protective action of, against radiation injuries, 6: 23
protective action of cysteine and Na sulfite against neutron inactivation of, 6: 3916(J)
reaction mechanisms, stereochemical criteria, 6: 5982
Epinephrine
(See Adrenaline.)
Equation of state
evaluation of virial coefficients, 6: 2124
free volume, for mixtures, application to detonations of solid explosives, 6: 4523
free volume, for rigid spheres, 6: 3802
of gases at high temperatures, 6: 1773
tables of the Lennard-Jones and Devonshire, at high temperatures and densities, 6: 3609
Erbium
internal conversion coefficients and multipole order of 210-kev transition, 6: 3688
neutron total cross sections as function of energy, 6: 5499(J)
preparation by reduction of chloride or fluoride with Ca in Ta container, 6: 3763
spectrum of, hyperfine structure in, 6: 2794(J)
spectrum of, isotope shifts in, 6: 1930(J)
x-ray absorption edges, 6: 6010(J)
Zeeman spectra obtained with echelle spectrometer, 6: 6203
Erbium chlorides
activity coefficients in aqueous solutions, 6: 558
transference numbers, 6: 563
Erbium ethyl sulfates
paramagnetic resonance spectra, 6: 6155(J)
Erbium isotopes $Er^{166}$
internal-conversion coefficients, 6: 1555, 2223(J)
Erbium oxide–uranium oxide systems
phase studies and crystal structure, 6: 2354(J)
Erbium oxides
crystal structure, 6: 2354(J)
Ergosterol
preparation of deuterated, 6: 2614(J)
Erythrocytes
(See also Hemoglobin.)
effects of radiation on, direct and indirect, 6: 1598
effects or x radiation on, 6: 778(J)
effects of x radiation on Co-induced increase of, 6: 3934(J)
formation, agent responsible for stimulation of, 6: 3881
glycolysis and phosphate turnover in human, 6: 4719
permeability of human, to Na and K, 6: 2577
potassium concentration in, effects of cholinesterase and choline acetylase inhibitors on, 6: 791
potassium exchange in, rate of, 6: 793
potassium exchange in, in sickle cell anemia, 6: 1388
preparation of $Cr^{51}$-labeled, 6: 4357(R)
preparation of $P^{32}$-labeled, for measurement of total and red-cell blood volume, 6: 5973(J)
transport of phosphate through membrane of, role of ATP in, 6: 4720
volume of, measurement by injected $P^{32}$-labeled cells, 6: 5973(J)
Escherichia coli
effects of streptomycin on radioinduced mutation, 6: 4366(J)
labeling with $S^{35}$, 6: 2349(J)
preparation of cell-free formic hydrogenylase from, 6: 546
radiosensitivity effects of Na hydrosulfite on, 6: 4705(J)
viability after x irradiation, effects of suboptimal incubation temperature on, 6: 1947
Esters
ultraviolet spectra, 6: 850
Esters, β-keto
chelation of Ni, in ethanol, 6: 1995
Estrogens
radiosensitivity effects, 6: 520(R), 763
Etching
(See also as subheading under specific materials.)
metallographic, research program for, 6: 3790(R)
Ethane
elastic scattering and neutralization of H ions in, 6: 6469(J)
Ethane-d
preparation, 6: 1628
Ethane, bromo-
dissociation by neutron capture, 6: 3761
self-diffusion coefficients in, 6: 3977(J)
Ethane, bromopentafluoro-
preparation, properties, and infrared spectrum, 6: 2323(J)
Ethane, 1-chloro-1, 1-difluoro-
thermal chlorination, 6: 6559(J)
Ethane, chloropentafluoro-
preparation, properties, and infrared spectrum, 6: 2323(J)
Ethane, 1,2-dibromo-
molecular vibrations of, and of its deuterated forms, 6: 137(J)
Ethane, 1,2-dichloro-
solubility of uranyl nitrates in, 6: 3513
Ethane, difluoro-
molecular dipole moments, 6: 131(J)
Ethane, 1,1-difluoro-
photochemical chlorination, 6: 6559(J)
Ethane, diphenyl-
scintillations in, 6: 961
Ethane, fluoro-
infrared and Raman spectra, 6: 3991(J)
Ethane, iodo-
dissociation by neutron capture, 6: 3761
Ethane, tetrabromo-
heat of reaction, 6: 4280
infrared and Raman spectra, 6: 4280
rotational isomerism, 6: 4280
Ethane, tetrachloro-
infrared and Raman spectra, 6: 4280
rotational isomerism, 6: 4280
Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)-
effects of x radiation on, in alcoholic solution, 6: 1169(J)
Ethane, 1,1,1-trichloro-2,2-bis(p-iodophenyl)-
synthesis of $I^{131}$-labeled, 6: 4456(J)
Ethane, trichlorotrifluoro-
surface boiling, heat transfer to, 6: 6586
Ethanol
biosynthesis by L. mesenteroides and P. lindneri, 6: 5969
biosynthesis by Pseudomonas lindneri via a fermentative pathway, 6: 1619(J)
deuterium exchange between water and, rate of, 6: 6551
effects of H isotope composition of, on reaction of acetic acid and diphenyldiazomethane in, 6: 5045(J)
ionization potential of, by mass spectrography, 6: 291(J)
protective action against x radiation, 6: 1386(J)
proton resonances in, effects of temperature on, 6: 1671(J), 1672(J)
radiosensitivity effects, 6: 46, 48
radiosensitivity effects of single pre-irradiation intraperitoneal injection of, 6: 3500
self-diffusion coefficients in, 6: 3977(J)
viscosity, temperature dependence of, 6: 6031(J)
Ethanol, 2-dimethylamino-
preparation of $C^{14}$-methyl-labeled, 6: 4027(J)
Ethanol-water systems
determination of activities, 6: 6374
Ether, bis(2-chloroethyl)
solvent extraction of Ge(IV) by, 6: 6531(R)
Ether fires
control of, tests on, 6: 1394
Ethers, chlorofluoroalkyl
preparation, 6: 465(P)
Ethyl acetates
dissociation in G-M counter, 6: 312(J)
Ethyl alcohol
(See Ethanol.)
Ethyl carbamate
(See Carbamic acid, ethyl ester.)
Ethyl chlorophosphates
mass spectrographic analysis, 6: 3346
Ethyl phosphates
mass spectrographic analysis, 6: 3346

Ethyl radicals
production of, and reaction with D, 6: 2877(J)
Ethylamine
appearance potentials and bond energies, 6: 4864(J)
Ethylamine, N-benzyl-N-(1-phenoxyisopropyl)-β-chloro-
synthesis of $C^{14}$-labeled, 6: 4467(J)
Ethylamine, 2-mercapto-
therapeutic uses in radiation sickness, 6: 3921(J)
Ethylene
fluorination with $HgF_2$, 6: 3984(J)
hydrogenation of, catalytic, 6: 1637
infrared spectrum and force constants of deuterated, 6: 4746
infrared spectrum of monodeuterated, 6: 5057(J)
molecular vibration of, and of its deuterated form, 6: 137(J)
polymerization, effects of γ rays on, 6: 3762(R), 5754(R)
thermal conductivity at low pressure, 6: 6591(J)
Ethylene, bromotriphenyl-
synthesis of $Br^{82}$-labeled, and ultraviolet absorption spectrum, 6: 5082(J)
Ethylene, chloro-
quadrupole spectrum and crystal structure of solid, 6: 1673(J)
stability of quaternary ammonium polyhalides in, 6: 2597
stability of tetramethylammonium polyiodides in, 6: 2302
Ethylene, 2-chloro-1,1-difluoro-
infrared and Raman spectra, 6: 5330(J)
thermodynamic functions for temperature range 253–600°K, 6: 5330(J)
Ethylene, chlorotrifluoro-
thermodynamic properties, 6: 1159(J)
Ethylene, chlorotrifluoro- polymers
melting points and polymer-solvent interaction of, 6: 1413(J)
solubilities, 6: 1412(J)
synthesis, 6: 3458(P)
thermal decomposition, 6: 126
Ethylene glycol
nuclear magnetic resonance absorption in, 6: 4625(J)
Ethylene, iodotriphenyl-
synthesis of labeled, 6: 2899
Ethylene polymers
as coatings for concretes, 6: 1724
electric conductivity of, effects of γ irradiation on, 6: 2772
properties and production, 6: 4429(J)
Ethylene, tetrafluoro-
polymerization and cyclization of, Hg-photosensitized, 6: 5575(J)
Ethylene, tetrafluoro- polymers
aqueous colloidal dispersion, 6: 6005(J)
extrusion of lubricated, from coagulated dispersion, 6: 6004(J)
spreading of liquids on, 6: 3988(J)
thermal decomposition, 6: 126
Ethylene, triphenyl-
ultraviolet absorption spectrum, 6: 5082(J)
Ethylenediamine
absorption of $CO_2$ by, 6: 5570
Ethylenediaminetetraacetic acid
(See Acetic acid, (ethylenediamine)tetra-.)
Europium
emission spectra of, in alkaline earth oxide and sulfide phosphors, 6: 2338(J)
hyperfine structure in spectra of, 6: 6451(J)
ionization potential of, in alkaline earth phosphors, 6: 2333(J)
Europium chlorides
activity coefficients of, in aqueous solutions, 6: 558
electric conductivity and activity coefficients of, in aqueous solution, 6: 2870(J)
transference numbers, 6: 563
Europium complexes
luminescence spectra of β-diketone and other, 6: 3539(J)
polarographic analysis, 6: 1651
Europium ions
reduction kinetics studied by nuclear induction, 6: 5756(J)
Europium(III) ions
absorption spectra and transition probabilities for, 6: 3418
Europium isotopes
alpha emission from, 6: 410, 1556
decay schemes, 6: 1907
electron spectra, 6: 954(R)
isotope shift constants from hfs, 6: 6451(J)
Europium isotopes $Eu^{152}$
beta and γ spectra, measurement of, 6: 3119(J)
decay schemes, 6: 3717(J)
gamma emission by, 6: 3120(J)
half lives, by mass spectrometric method, 6: 4982
Europium isotopes $Eu^{153}$
energy levels, from $Sm^{153}$ β decay, 6: 5515(J)
internal conversion of 70- and 102-kev γ rays, 6: 5474(R)
Europium isotopes $Eu^{154}$
decay schemes, 6: 3717(J)
gamma emission by, 6: 3120(J)
half lives, by mass spectrometric method, 6: 4982
Europium isotopes $Eu^{155}$
decay schemes, 6: 5915(J)
Europium oxides
magnetic susceptibility at low temperatures, 6: 4297(J)
Eutectics
(See also specific eutectics; e.g., Potassium–sodium eutectics.)
formation, 6: 119
Evaporation
(See also as subheading under materials.)
from saturated plane areas into turbulent boundary layer, effect of width and length on, 6: 5769(J)
from thermionic cathodes, tracer studies, 6: 5529(J)
Evaporators
(See also Distillation apparatus.)
vacuum type, with high velocity pumping, 6: 2916(J)
vacuum type, with straight wire heater, 6: 6019
Experimental breeder reactor
operating characteristics, 6: 5712(J)
Explosions
(See also Atomic explosions; Shock waves.)
equations of state for the products of, tables, 6: 3609(J)
fast jets from collapsing cylinders in, 6: 3301
Explosives
equations of state for detonation of solid, 6: 4523
Extensometers
in measurement of stress-strain curves and creep of semiconductors, 6: 6705(R)
Extraction apparatus
(See also Pulse columns; Percolators.)
continuous liquid-liquid extractor for solvents of various density, design of, 6: 1686
liquid-liquid, design, 6: 2340(R)
for liquid metals, 6: 5376
performance and evaluation of, in air cleaning, 6: 3266
for separation of Co from Ni, 6: 5757
for solvent extraction of $P^{32}$ from pile-irradiated S, 6: 2635
Eyes
cataract formation in and retinal damage to, following x irradiation of heads of newborn mice, 6: 1952(J)
effects of radiation on, 6: 505
effects of radiation on anterior segment of, 6: 3931(J)
effects of x radiation on, in newborn mice, 6: 763
effects of x radiation on mitotic activity and nuclear fragmentation of lens epithelium in normal and cysteine-treated rabbits, 6: 2816(J)
lens opacities and cytological destruction in, following x irradiation, 6: 2562
lens opacities in mice, radioinduced, 6: 5275(J)
pathological effects of radiation on, 6: 5716(R)
radiosensitivity, 6: 506(R)
radiotherapy of bilateral retinal gliomas, case histories, 6: 6518(J)
treatment of corneal lesions in, with $Sr^{90}$ plaques, 6: 6284(J)


## F


Fansteel Metallurgical Corp.
progress reports, 6: 2662(R), 4076(R)
progress reports on protective coatings for Ti alloys, 6: 5608(R)
Faraday pumps
(See Electromagnetic pumps.)
Farlow Gap Mine (North Carolina)
pegmatite minerals of rare-earth type in, 6: 4496
Fast neutrons
counting with hydrogenous liquid phosphors, 6: 2133
counting with liquid phosphors, 6: 4577
deposition of energy of, in bone marrow, effects of bone on, 6: 5426
detection, scintillation spectrometer for, 6: 6124
detection by NTA nuclear track emulsions, reliability of, 6: 2268
detection by proton recoils, 6: 640(R)
detection with Hornyak detector, 6: 6120
detector for, in presence of radiation, 6: 641
dosage determinations in standard tissue, 6: 1508
dosage determinations with a calorimetric dosimeter, 6: 4693(R)
effects in tissue, 6: 34
effects on seed germination and seedling growth of pine, 6: 6253(J)
interactions with D and protons, 6: 716
measurement of, methods for, 6: 2810
measurement of flux of, methods for, 6: 1503
mixed with γ radiation, instrument for detection and measurement of, 6: 6512(R)

Fast neutrons (cont'd)
nuclear reactions of, method for study by means of complex neutron spectra, ⇩: 3720(J)
permissible limits, ⇩: 4373(R)
scattering, ⇩: 296(R)
scattering by Al, Bi, Cr, Cu, Fe, Pb, Ni, and Ta, ⇩: 980
scattering by $O^{16}$, ⇩: 1895(J), 2204(J)
scattering by protons, ⇩: 729(J)
Fatty acid complexes
with calcium and Sr, ⇩: 77
Fatty acids
addition compounds of perfluoro, with ethers and tertiary amines, ⇩: 132(J)
biosynthesis in neoplastic tissues, in vitro tracer study, ⇩: 6578
biosynthesis of labeled, by liver slices, ⇩: 174(J)
carbon ($C^{14}$) distribution in, of liver, ⇩: 169(J)
determination by thiobarbituric acid, ⇩: 1590
effects of radiation on metabolism of, ⇩: 38
formate as precursor of, in fungi, ⇩: 2583(J)
infrared spectra of branched long-chain, ⇩: 2896
interesterification during methanolysis with anion exchange resin, ⇩: 5979
metabolism of, effect of heparin on, ⇩: 19(J), 497(R)
oxidation of, as affecting enzyme inactivation, ⇩: 1590
oxidation of, effects of cyclophorase-mitochondrial system of rabbit liver on, in acetoacetic acid formation, ⇩: 6491
oxidation of, in rat tissues, ⇩: 792
time factors in synthesis of labeled, in rats and mice, ⇩: 4718
Feces
collection on an out-patient basis, portable equipment for, ⇩: 3882
rapid estimation of tracers in, apparatus for, ⇩: 1975(J)
Federal Telecommunication Lab., Inc.
progress reports, ⇩: 4561(R)
Feedback systems
design, ⇩: 5830(R)
Nyquist criterion of stability for linear, ⇩: 2674
Fermentation
stimulation of, with K, ⇩: 5542
Fermions
(See also Electrons; Mesons; Neutrinos; Neutrons; Protons.)
interactions, theory, ⇩: 4923(J), 4999(J), 5790
interactions and selection rules, ⇩: 5005(J), 5245(J)
Ferric ions
(See Iron(III) ions.)
Ferriin
exchange reactions with ferroin, ⇩: 85, 572
Ferritin
as agent in vasodepression of blood vessels following irradiation, ⇩: 1600
identification of a substance resembling, from the blood of animals following whole-body irradiation, ⇩: 6255(J)
Ferroin
exchange reactions with ferriin, ⇩: 85, 572
Ferrous ions
(See Iron(II) ions.)
Fetuses
effects of ionizing radiation and metabolic inhibition on developing nervous system in mammalian, ⇩: 3178(J)
effects of x radiation on development of human, case history, ⇩: 5015(J)
effects of x radiation on subsequent fertility of mice, ⇩: 5947(J)
iodine uptake by, ⇩: 2830(J)
pathological effects of x irradiation, in mice, ⇩: 6494
radiosensitivity, ⇩: 2572(J)
Fibrin
separation and $S^{35}$ assay of, ⇩: 565
Fibrinogen
effects of toluidine blue on coagulation of, by thrombin, ⇩: 6492
effects of x radiation on viscosity and ultracentrifugal behavior of, ⇩: 30
sedimentation constants for, determined at various temperatures and speeds of rotation, ⇩: 3883
turnover rate in dogs, ⇩: 565
ultracentrifugal and viscosity studies, ⇩: 4342
Fibrinolysis
effects of radiation on, and effects on hemorrhage, ⇩: 510(R)
physiological effects, ⇩: 510(R)
radioinduced, effects on hemorrhage, ⇩: 4701
Field laboratories
radiochemical, design, ⇩: 5338(J)
Field theory
(See also Quantum electrodynamics.), ⇩: 744(J)
abbreviated theory of spin-½ particles, ⇩: 5246(J)
absorber theory of radiation, ⇩: 4996(J)
adiabatic nuclear potentials, ⇩: 3138(J)
Field theory (cont'd)
angular momentum in nonlocal, ⇩: 2797(J)
application of self-consistent field to nucleus-nucleon interaction, ⇩: 6487(J)
beta-matrix formalism for meson and photon fields, ⇩: 4574(J)
bound interaction representation in, ⇩: 1362(J)
charge and mass coefficients in subtractive, ⇩: 3451(J)
classical equations of motion of point particles, ⇩: 5525(J)
configuration space methods in, ⇩: 2233(J)
convergence of Bethe-Salpeter equation in, ⇩: 3145(J)
convergent S-matrix formalism for, ⇩: 3144(J)
Coulomb scattering cross sections for particles of spin 0, ½, or 1, ⇩: 3730(J)
covariant representation of the nuclear field, ⇩: 1306(J)
distinction between particles and antiparticles, ⇩: 1368(J)
electrodynamics in the interaction representation, lack of gauge invariance in, ⇩: 5243(J)
electron radius in, ⇩: 2238(J)
equations of particles of arbitrary spin, ⇩: 1059(J)
excited states of particles in adiabatic coupling to a scalar field, ⇩: 3455(J)
expressions analogous to Poynting vector in meson-field equation, ⇩: 2240(J)
fundamental equations in relativistic quantum, ⇩: 3136(J), 3456(J)
generalized field equations, advanced and retarded solutions of, ⇩: 4292(J)
impulse approximation in theory of scattering, ⇩: 1544, 2798(J)
interaction of electrons with one-dimensional quantized electromagnetic field, ⇩: 6101(J)
interactions of nucleons, mesons, and photons, ⇩: 1055(J)
interactions of spin-1 particles with meson fields, ⇩: 1061(J)
interactions of spin-½ particles with a central pseudoscalar field, ⇩: 752(J)
interactions of spin-½ particles with electromagnetic field, ⇩: 4283
interactions of spin-0 and -½ particles in electric field, ⇩: 2545(J)
interactions of two-nucleon system with neutral pseudoscaler meson field, nonadiabatic method, ⇩: 5924(J)
meson production in high-energy collisions, ⇩: 5002(J)
mesonic proper-field, ⇩: 2459(J)
multipole solutions of meson fields, ⇩: 1369(J)
nonlinear, force between particles in, ⇩: 2237(J)
nonlocal interactions in quantized, application to Compton effect, ⇩: 6700(J)
nonlocal quantization, ⇩: 751(J)
particle scattering in meson fields, ⇩: 1042(J)
perturbation treatment of closed states in, ⇩: 456(J)
pseudoscalar coupling of mesons, ⇩: 5146
quantization of fields with finite number of components, ⇩: 3731(J)
quantized boson fields, calculation of, ⇩: 745(J)
quantum, application of resolvent operators, ⇩: 5003(J)
quantum, formulation with charge as operator, ⇩: 5242(J)
quantum, formulation with fundamental length, ⇩: 5004(J)
quantum theory of scattering, ⇩: 1039(J)
radiative corrections to form and breadth of emission line, ⇩: 6485(J)
relation of Yukawa's nonlocal to local field theory, case of free field, ⇩: 6209(J)
relativistic dynamics of a system of particles interacting at a distance, ⇩: 2790(J)
renormalizable, divergent integrals in, ⇩: 746(J)
scalar or pseudoscalar scattering cross sections for spin-0, -1, or ½ particles, ⇩: 4293(J)
scattering problems in, ⇩: 727(J)
space inversions for fields of spin ½, ⇩: 1931
superquantization of quantized field, ⇩: 6207(J)
thermodynamic vacuum oscillation of wave fields, ⇩: 5528(J)
threshold for particle creation in quantum, ⇩: 1942(J)
unified, with varying charge and rest mass, ⇩: 4995(J)
wave equations for spin-½ particle in unitary, ⇩: 6724(J)
wave equations of spin-0 or spin-1 particles, ⇩: 3452(J)
Film cooling
(See also Sweat cooling.)
critical velocity of liquid injection in, ⇩: 5592(R)
internal, experiments in 4-in. duct with gas temperatures to 2000°F, ⇩: 3561
Films
(See also specific films under material, e.g., Silicon oxide films; see also Adsorbed films; Metallic films.)
fluorescence induced by α bombardment in thin, ⇩: 5909
preparation and properties, symposium on, ⇩: 5114
Filter materials
(See also specific filter materials.)
for air-borne dust, use of dimethyl terephthalate, ⇩: 2908(J)
for air cleaning, efficiency of, ⇩: 3555(R)

Filter materials (cont'd)
effective fiber diameter, 6: 517(J)
for stack gases, design and testing, 6: 2913(J)
Filter papers
testing, for use in face-mask filter units, 6: 6511(R)
Filters
(See also Electronic filters; Glass wool filters; Screens; Water purification equipment.)
air, radiochemical analysis for Pu, 6: 3182(R)
for air cleaning, efficiency of, 6: 3555(R)
for air cleaning, performance and evaluation of, 6: 3266
for dry-boxes, 6: 5814
in gravimetric determination of air dusts, 6: 6023(J)
for stack gases, design, 6: 2913(R)
Filtration
(See also under materials and processes.)
of aerosols, inertial mechanisms in, 6: 517(J)
Fire extinguishing agents
testing of, for ether fires, 6: 1394
Fish
effects of temperature on physiological processes, 6: 5933(R)
effects of x radiation on differentiation of secondary sexual characteristics, 6: 5020(J)
population in White Oak Lake, 6: 2248
size of, in White Oak Lake, 6: 11
Fission
(See also appropriate subheadings under fissionable elements and isotopes; also subheading from fission under specific radiations; see also Capture-to-fission ratios; Chain reactions; Multiplication factor; Nuclear reactions; Spontaneous fission.)
activation energy of nuclear, theory, 6: 1840
asymmetry of yields in, as function of excitation energy, 6: 3845
bibliographies, 6: 1529
distribution of nuclear charge in, 6: 1424(R), 5298(R)
long period delayed neutrons from, 6: 1860
number of fissions induced in fissile material by a uniform distribution of neutrons, theory, 6: 1536
of $Pu^{239}$, neutron spectrum from, 6: 5470
systematics of, 6: 2174(J)
theory, 6: 1261
Fission chambers
cylindrical, transient and polarity effects on, 6: 5639(R)
operation in liquid $N_2$, 6: 5487
saturation properties of U, 6: 4123
Fission product utilization conference
papers given at BNL, Feb. 1952, 6: 4801
Fission products
(See also isotopes of the specific elements produced by fission; see also Spallation products.)
absorption from sand by marine organisms, 6: 5933(R)
activity analysis, 6: 732(R)
activity distribution in, 6: 731
beta emission, 6: 4984
bromine, interchange with carrier Br, 6: 3963(J)
charge of, as function of pressure of stopping gas, 6: 394(J)
decay of mixtures of, time of peak activity, 6: 4659
industrial uses of, conference at BNL Feb. 1952, 6: 4801
industrial uses of, health hazards anticipated from, 6: 5279(J)
ion exchange separation of, automatic equipment for, 6: 2326(J)
maximum permissible limits in air, 6: 1611
metabolism, 6: 5278
metabolism in domestic animals, 6: 504(R)
neutron emission, 6: 4724(R)
neutron emission from, probability of, 6: 1424(R), 5298(R)
as radiation source for sterilization, pasteurization and insect control in foods and drugs, 6: 6497(R)
radioactive, industrial uses of, 6: 1706
radioactivity of, nomograms for calculating, 6: 406
radiochemical analysis, 6: 5298(R)
range-energy studies of, mathematical comparison, 6: 3668(J)
ranges in air, A, D, He, and H, 6: 2504
relationship to total Ca and $Ca^{45}$ in Portulaca on Eniwetok Atoll following atomic bomb explosion, 6: 3159
tissue distribution of mixed, in rats, 6: 6291(R)
yield curves, 6: 1327(J), 1793
yields, review of work at McMaster Univ., 6: 3689(J)
Fission recoils
energy distribution of, as function of neutron energy, 6: 3846
energy-ionization relation for, proposed experiment to determine, 6: 4640
Flames
spectra, 6: 4114
Flavones
chemical analysis, 6: 1987
Flavones (cont'd)
chromatographic separation of, and isolation of pigments from, 6: 1987
effects of administration before and after irradiation on radiosensitivity of transplanted cancer tissue in rats, 6: 6285(J)
identification by filter-paper chromatography, 6: 1969(J)
preparation of labeled and unlabeled derivatives of, 6: 1987
prophylactic action against radiation injuries, 6: 3502(J)
Flavonoids
(See also specific flavonoids.)
metabolism and urinary excretion, 6: 5540
Florida State Univ.
progress reports, 6: 2596(R)
Flotation
(See also as subheading under materials being separated.)
collector depressant equilibria in, 6: 890, 894
surface reactions in, kinetics, 6: 3293(R), 3294(R)
tracer techniques in, 6: 3294(R)
Flotation reagents
(See also specific compounds used for flotation.)
tannic acid and quebracho as, 6: 890
Flowmeters
(See also Air flow; Fluid flow; Gas flow; Liquid flow.)
a-c induction type, design and performance, 6: 2912(J)
with adjustable venturi and universal flow indicator, 6: 6216(P)
calibration, 6: 3556(R)
electrical for recording blood flow, design, 6: 2984(J)
for gas flow measurements, design of, 6: 1185
magnetic, mathematical analysis of potential distribution, 6: 3558
for NaK flow measurements, design and calibration, 6: 4476
for small flows of gas, design, 6: 4312(P)
thermal, design, 6: 4311(P)
Fluid flow
(See also Convection; Gas flow; Liquid flow.)
adsorption of particles in porous materials, 6: 4486(J)
annular liquid flow with cocurrent air flow in horizontal tubes, 6: 6033(J)
apparatus for governing, design of, 6: 3465(P)
bibliographies, 6: 1719(J)
dimensional analysis, 6: 874(J)
in ducts with a uniformly distributed leakage, 6: 875(J)
equations of boundary layer near stagnation point, 6: 1716(J)
flow of He II around thermally conducting sphere, 6: 5124(J)
flowmeter for, using adjustable venturi and universal flow indicator, 6: 6216(P)
heat transfer and friction coefficients for, in circular tubes having square-thread-type roughness, 6: 5089
heat transfer in, theory of, 6: 3275(J)
measurements of two-dimensional, incompressible, nonviscous shear, in a 90° elbow, 6: 4768
through porous systems, 6: 2360
relation of generalized integral ratios for boundary layers to hydrodynamic theory of heat exchange, 6: 6025(J)
stability of plane Poiseuille, 6: 4487(J)
supersonic conical, at obstacle, equations for, 6: 1718(J)
turbulence, 6: 4480
Fluid flow (laminar)
analysis of, about a flat plate parallel to direction of generating body force, 6: 2068
Bernoulli's theorem for, 6: 2911(J)
boundary layers on cylindrical bodies with nonstationary axial motion, 6: 6024(J)
diffusion of gases in, 6: 1205
heat transfer by, mathematical analysis, 6: 5091
heat transfer by, theory, 6: 4048, 4049
temperature field for, on a porous flat plate, 6: 2910
Fluid flow (turbulent)
coefficient of hydraulic resistance in smooth pipes, 6: 6029(J)
diffusion theory of suspensions in, and erosion by, 6: 6027(J)
dynamics of suspended particulate matter in, 6: 184
effect of homogeneous turbulence on material lines and surfaces, 6: 4770(J)
evaporation from saturated plane areas into, effect of width and length on, 6: 5769(J)
heat transfer and diffusion equations for, solution of, 6: 6349(J)
heat-transfer coefficients in, determination of, 6: 3274(J)
heat transfer in, 6: 4480
heat transfer in, mathematical analysis, 6: 5091
heat transfer in, theory, 6: 3560
heat transfer with Hg as working fluid, 6: 5594
mixing in, coefficient of, 6: 6026(J)
nonhomogeneous, theory, 6: 4769(J)
pressure drop in ducts and annuli, bibliography, 6: 3776
shear flow in bends, theory, 6: 2651
theory of, 6: 2071(J)

Fluid flow (turbulent) (cont'd)
velocity distribution in pipes, theory, ⚖: 6028(J)
Fluid propellants
quantitative evaluation, ⚖: 1438(J)
Fluids
(See also Gases; Liquids; Metals (liquid).)
activation by circulating through a neutron flux, ⚖: 1908
adsorption, percolators for, ⚖: 5815
critical state of normal, ⚖: 1646(J)
heat transfer in, ⚖: 3775
viscosity of, second coefficient and ratio of coefficients, ⚖: 4848(J)
Fluoaluminates
complex formation in aqueous solutions, ⚖: 4426(J)
Fluorenamine
synthesis of N-methyl-$C^{14}$ labeled, ⚖: 6584(J)
Fluorene
fluorescence, ⚖: 4870(R)
2-Fluorenecarboxylic acid
preparation, ⚖: 92
Fluorescein
selective concentration in tumor tissues, as type of cancer diagnosis, ⚖: 3208(J)
Fluorescence
(See also Luminescence; Phosphorescence.)
of alpha-irradiated liquids, mechanism, ⚖: 4655(J)
of alpha-irradiated xylene and xylene-terphenyl, ⚖: 5506(J)
of alpha-irradiated xylene-terphenyl, ⚖: 5505(J)
chromatographic analysis for, in Drosophila, ⚖: 767(J)
effect of $CaWO_4$, on bone healing, ⚖: 3169(J)
exciton theory for, ⚖: 306(J)
induced by $\alpha$ or $\gamma$ rays, ⚖: 653(R)
intensity measurements, apparatus for, ⚖: 6412
measurements of, with different crystals, ⚖: 2134(R)
in mutant of maize, ⚖: 774(J)
in organic liquid solutions under $\alpha$ or $\gamma$ excitation, ⚖: 2134(R), 2716(J)
in phosphors exposed to $\alpha$ and $\gamma$ rays, ⚖: 1392(R)
Fluoride complexes
equilibrium constants, ⚖: 535
with titanium in acid solution, ⚖: 3226(J)
Fluorides
(See also Fluorine compounds.)
amperometric determination with Al-dye complex, ⚖: 5994(J)
bibliographies, ⚖: 2878
composition and structure of alkali metal, containing excess F, ⚖: 2033(J)
cryoscopy of, in fused $LiBO_2$, ⚖: 3223(J)
exchange reactions with HF, ⚖: 125
phase studies of fused, ⚖: 2871(J)
photometric determination in water with Al-hemotoxylin, ⚖: 6547(J)
recovery from solid sludge, ⚖: 3459(R)
solubility in HF, ⚖: 2879
spectrophotometric determination with Zr-alizarin, ⚖: 6548(J)
tissue distribution, ⚖: 2279(R)
toxicology of, after low-level, long-term exposure to fluoride-containing atmosphere, ⚖: 2279(R)
vacuum evaporation, ⚖: 3779
Fluorination
(See also as subheading under materials fluorinated; also compounds formed by fluorination.)
with $HgF_2$, process for, ⚖: 3984(J)
review of progress during 1951, ⚖: 6003(J)
Fluorine
colorimetric determination with ferron and $FeCl_3$, ⚖: 4415(J)
determination, bibliography on, ⚖: 6555(R)
determination by amperometric titration with $Th(NO_3)_4$, ⚖: 3990
determination by indirect Th titration, ⚖: 4414(J)
determination by measurement of nuclear magnetic resonance, ⚖: 1142(J)
effects on Ca metabolism in bones of growing pig, ⚖: 5940(R)
electron affinity to, ⚖: 124, 555(J)
entropy, possible errors in determination from heat-capacity data, ⚖: 5331(J), 6556
exchange reactions with halogen fluorides, ⚖: 2320
heat of dissociation, by effusion method, ⚖: 4421(J)
heat of dissociation, measurement and apparatus, ⚖: 5746
kidney pathology caused by, ⚖: 2835(J)
molecular structure by quantum mechanics, ⚖: 3999(J)
pathological effects, in man, ⚖: 6318(J), 6319(J)
preparation by reduction of NaF with $Na_2P_2O_6$, ⚖: 3992(J)
production by chemical means, ⚖: 3993(J)
production using fluorine generator, ⚖: 1663
proton reactions (p,$\gamma$), ⚖: 1859
reaction with $KClO_3$, ⚖: 829(J)
Fluorine (cont'd)
reaction with $PrF_3$, ⚖: 5060(J)
reaction with steam at elevated temperatures, ⚖: 3244
reactivity of, with fluorocarbons, ⚖: 1662
removal from $H_2O$ with $Ca_3(PO_4)_2$, mechanism of, ⚖: 4423(J)
removal of particles and gases containing, from plant atmosphere, ⚖: 6037(J)
spectra of flames supported by, ⚖: 2032(J)
spectrochemical determination of organically bound, application of hollow cathode source to, ⚖: 849
thermodynamic properties at zero pressure, ⚖: 3803
thermodynamic properties of atomic and molecular, ⚖: 3987(J)
thermodynamic properties of diatomic, in ideal gaseous state, ⚖: 2616(J)
thermodynamic properties of monatomic, ⚖: 2028
volumetric determination with $Th(NO_3)_4$, ⚖: 4413(J)
waste disposal, ⚖: 3244
Fluorine (liquid)
density, ⚖: 2030(J)
Fluorine chlorates
preparation, ⚖: 829(J)
Fluorine compounds
(See also Fluorides.)
crystal structure of $NaPF_6$, ⚖: 3973(J)
exchange reactions with fluorine, ⚖: 2320
hydrolysis of $K_3MoO_3F_3$ and $K_2TiOF_4$, ⚖: 3993(J)
infrared spectra, ⚖: 1157(J)
properties, progress review for 1951, ⚖: 6003(J)
thermal decomposition of $KCrO_3F$, ⚖: 3993(J)
Fluorine generators
design and performance, ⚖: 1663
Fluorine ions
catalytic effect on polymerization of silicic acid, ⚖: 4427(J)
collision of negative, with atoms, ⚖: 3705(J)
Fluorine isotopes
exchange between HF and interhalogen compounds, ⚖: 125
Fluorine isotopes $F^{17}$
properties of energy states of, ⚖: 1859
Fluorine isotopes $F^{18}$
formation by proton bombardment of Cu, ⚖: 700
yield from protons on medium and heavy elements, ⚖: 3853(J)
Fluorine isotopes $F^{19}$
deuteron reactions (d,$\alpha$), ⚖: 2752
deuteron reactions (d,$\alpha$) and (d,p), ⚖: 1329(J)
deuteron reactions (d,n), angular distribution of neutrons from, ⚖: 5230
energy levels, ⚖: 1011(J)
energy levels, from proton inelastic scattering, ⚖: 5495(J)
gamma reactions ($\gamma$,n) and ($\gamma$,2n), cross sections, ⚖: 5880(J)
ground state parity, ⚖: 5230
nuclear magnetic moments, ⚖: 995(J), 1307(J)
nuclear magnetic shielding effects of, on electron distribution in molecules, ⚖: 6564(J)
nuclear spin echoes of, slow beats in, ⚖: 2169(J)
proton reactions (p,$\alpha$,$\gamma$), angular distributions of $\gamma$ rays from, ⚖: 4635(J)
proton reactions (p,$\alpha$,$\gamma$), $\gamma$ polarization in, ⚖: 3085(J)
proton reactions (p,$\gamma$), ⚖: 3688(R)
proton reactions (p,$\gamma$) and (p,n), thresholds and resonances in, ⚖: 2756(J)
proton reactions (p,n), excitation functions for, ⚖: 1021(J)
proton reactions (p,n), threshold determinations, ⚖: 5474(R)
radiometric determination in gaseous fluorides, ⚖: 125
Fluorine isotopes $F^{20}$
beta emission, ⚖: 6149
decay schemes, ⚖: 3720(J)
energy levels, ⚖: 1329(J)
Fluorocarbon polymers
fabrication by powder molding, ⚖: 461(P)
preparation, progress review for 1951, ⚖: 6003(J)
properties and production of polyethylene derivatives, ⚖: 4429(J)
Fluorocarbons
(Compounds containing only C and F; see also specific compounds.)
crystal structure of $C_8F_{12}$, ⚖: 5323
determination in air using infrared gas analyzer, ⚖: 3614
from fluorination of thiophene, ⚖: 3985(J)
infrared and Raman spectra, ⚖: 2029
molecular structure and thermal properties, ⚖: 3530
preparation, ⚖: 5328
preparation with $BiF_5$, ⚖: 1570(P)
production, ⚖: 464(P)
pyrolysis in contact with heated Pt filament, ⚖: 5748(J)
stabilizing of, methods for, ⚖: 1662
synthesis and physical properties, ⚖: 5332(J)

**Fluorocarbons (cont'd)**
thermodynamic properties, 6: 127(J), 5328
thermodynamic properties in the ideal gaseous state, 6: 2026
**Fluoroform**
microwave spectra and molecular structure, 6: 4434(R)
**Fluorohalocarbon polymers**
crystallinity in development of, 6: 2034(J)
**Fluorohalocarbons**
(Compounds containing only C, F, and other halogens; see also specific compounds.)
melting points and polymer-solvent interactions of, 6: 1413(J)
polymerization at high pressures, 6: 459(P)
solubilities, 6: 1412(J)
**Fluorohalohydrocarbons**
(Compounds containing only C, H, F and other halogens; see also specific compounds.)
infrared and Raman spectra, 6: 2029
polymerization, review, 6: 4428(J)
**Fluorohydrocarbons**
(Compounds containing only C, F, and H; see also specific compounds.)
polymerization, review, 6: 4428(J)
preparation by $ClF_3$ fluorination, 6: 2618(J)
preparation, by perfluorination of a hydrocarbon, 6: 6210(P)
preparation with $SbF_3$, 6: 1664(J)
reaction of alkyl fluorides with ethanolic Na ethoxide, kinetics, 6: 4424(J)
solvolysis of alkyl fluorides in aqueous ethanol, kinetics, 6: 4425(J)
**Fluoroörganic acids**
thiolesters, synthesis and infrared absorption spectra, 6: 5749(J)
**Fluoroörganic compounds**
ionization constants, 6: 2035(J)
polymerization, 6: 5747(R)
preparation for use as lubricants, 6: 4300(P)
preparation of perfluoropropene and tetrafluoroethylene, 6: 4301(P)
spectrochemical analysis of, application of hollow cathode source to, 6: 849
synthesis of perfluorinated, 6: 6002(J)
synthesis of, review of recent advances in, 6: 1157(J)
**Fluoroörganic compounds, oxygenated**
isotopic dilution analysis for O, 6: 5992(J)
**Fluoroörganic polymers**
preparation and properties at low temperatures, 6: 5747(R)
**Fluorophosphoric acid, diisopropyl ester**
effects on concentration of K in erythrocytes, 6: 791
**Fluorophotometers**
for uranium determination, performance, 6: 5833(R)
**Fluxmeters**
design, 6: 2415
for magnetic field measurements, design, 6: 5830(R)
**Foil detectors**
(See Metal foil detectors; Plastic film detectors.)
**Folic acid**
synthesis of labeled, 6: 853(J)
**Food**
contamination by radioactive particulate matter, 6: 5023(J)
decontamination following radiological contamination, 6: 5023(J)
effects of irradiation on nutritional value of, 6: 2356(R)
effects of radiation on, 6: 4353(R)
preservation by irradiation, 6: 916(R), 2356(R)
radioactivity induced in, by thermal-neutron irradiation, 6: 5026(J)
sterilization by cathode rays, 6: 5720(J)
sterilization by radiation, 6: 2253(R), 2330(J), 2569(R), 4353(R)
sterilization by radiation, prevention of side effects in, 6: 5271(J)
suitability for consumption after exposure to atomic explosions, methods for determining, 6: 6489(J)
**Formaldehyde**
reactions with aldehydes containing one $\alpha$-hydrogen, 6: 179(J)
separation from HCOOH and $CH_3OH$, 6: 3211(R), 3212(R), 6526(R)
synthesis of C-labeled, by decomposition of triphenylethanol, 6: 5077(J)
synthesis of $C^{14}$-labeled from methanol-$C^{14}$, 6: 4025(J)
**Formamide, dimethyl-**
as solvent in organic polarography, 6: 2598
**Formates**
biosynthesis of, studied with labeled precursors, 6: 2837
determination by isotopic procedure, 6: 2837
incorporation into pentosenucleic acids in various rat organs, 6: 2553
**Formic acid**
effects of $\alpha$ particles on, 6: 5346
incorporation and retention in nucleic acids, 6: 566
isotopic effects in dehydration of, 6: 1122(J)
labeled with $C^{14}$, effect on leukemia in mouse, 6: 3928(J)
oxidation in irradiated solutions, 6: 556
as precursor of carboxylic acids in fungi, 6: 2583(J)
separation from HCHO and $CH_3OH$, 6: 3211(R), 3212(R), 6526(R)
**Formic acid (cont'd)**
synthesis, by reduction of $CO_2$ with $LiAlH_4$, 6: 5043(R)
**Formic acid–iron(II) sulfate–oxygen systems**
gamma-ray induced chain oxidation of $FeSO_4$ in, 6: 3215
**Formic hydrogenylase**
properties and preparation of, from Escherichia coli, 6: 546
**Fossils**
age estimations by measuring $C^{14}$ activity, 6: 5695
comparison with similar recent bones, 6: 764
**Fourier transforms**
interpretation of, in x-ray diffraction analysis, 6: 2208(J)
**France**
uranium minerals found in, 6: 4064(J)
**Francium**
electron configurations, 6: 5116
tissue distribution, 6: 2005(J)
**Francium isotopes**
separation from proton-bombarded Th target, 6: 818
**Francium isotopes $Fr^{211}$**
half lives, 6: 3345
**Francium isotopes $Fr^{212}$**
decay schemes, 6: 4525
**Francium isotopes $Fr^{213}$**
half lives, 6: 3345
**Francium isotopes $Fr^{223}$**
properties of, review, 6: 2005(J)
**Free energy**
(See as subheading under specific materials.)
**Free radicals**
formation of negative hydrocarbon, 6: 6528
molecular orbital calculations of properties, 6: 4435
**Freemen Mine (N. C.)**
pegmatite minerals of rare-earth type in, 6: 4496
**Frequency converters**
mercury contact relay type, for 10-cps medium power, 6: 5833(R)
**Friedel-Crafts reactions**
evaluation of, for producing functionally labeled ketones, 6: 4450(J)
**Fructose**
biosynthesis of labeled, 6: 1700
determination in fructose-6-phosphate and fructose-1-6-diphosphate, 6: 1399
metabolism in canna leaves, tracer study, 6: 6523
**Fructose phosphates**
analysis for fructose, 6: 1399
**Fuels**
(See also fuels by name; e.g., Oils; see also Fluid propellants.)
effects of radiation on, 6: 916(R)
**Fumaric acid**
effects of radiation on aqueous, 6: 2888(J)
synthesis of $C^{14}$-labeled, 6: 5079(J)
**Fungi**
carboxylic acids in, formate as precursor of, 6: 2583(J)
citrate biosynthesis in, 6: 3951(J), 3954(J)
effects of $\alpha$-particles on mutations in, 6: 1085
effects of $\alpha$-particles on spore germination and microthallus development of, 6: 1073
lethal and mutagenic action of ionizing radiations on, mechanism of, 6: 1948, 4365(J)
metabolism of, studied by fermentation of glucose by Rhizopus oryzae, 6: 2286, 3148
mutation frequencies induced by x rays and ultraviolet in, effect of supplementary factors on, 6: 4368(J)
pathological effects on maize, 6: 499
preparation of $C^{14}$-labeled, and radiation effects on, 6: 4387
radiosensitivity of Fusarium oxysporum, 6: 5285
radiotherapy of mycosis fungoides with $P^{32}$, 6: 2832(J)
synthesis of amino acids and carbohydrates by, 6: 759
**Furnaces**
(Including devices using conduction, induction, radiation, etc. See also pertinent metallurgical subheadings under the material, e.g., casting and metallurgy. See also Induction furnaces; Resistance furnaces.)
for arc melting and thermal analysis, 6: 5604
high-temperature, for use in nuclear reactors, design of, 6: 1316
for measurement of thermal properties of non-metallic materials at high temperatures, design, 6: 3581(R)
for melting steel in vacuum, design of, 6: 246(J)
for melting Zr alloys, design, 6: 4505(R)
multiple-hearth arc, for Zr melting, 6: 3791
for sintering studies, design of, 6: 1449(R)
temperature control with resistance thermometer, 6: 6020
**Fused salts**
electrolysis, 6: 599(R)
phase studies, 6: 2871(J)
phase studies, methods used in, 6: 1398(J)

Fused silica
structure, neutron and x-ray-diffraction study of, δ: 2102
ultraviolet emission following α-bombardment, δ: 6708(J)

Gadolinium
crystal structure, near the Curie point, δ: 6059
dilatometric and magnetic behavior from −195 to 300°C, δ: 5563(J)
electric conductivity; δ: 5396(R)
electric conductivity, near the Curie point, δ: 6059
fluorescence spectra in borax beads, δ: 6571(J)
hyperfine structure, δ: 3839(J), 6451(J)
magnetic properties, δ: 4804(R)
preparation by calcium reduction of chlorides, δ: 1171
Gadolinium borides
paramagnetic properties of $GdB_6$, δ: 4993(J)
Gadolinium chlorides
vapor phase hydrolysis, heat and free energy of reaction, δ: 6330
Gadolinium compounds
ferrates(III), with two ferromagnetic Curie points, δ: 5582(J)
Gadolinium isotopes
alpha emission from, δ: 410, 1556
isotope shift constants from hfs, δ: 6451(J)
Gadolinium isotopes $Gd^{155}$
magnetic moment of, from hfs measurements, δ: 3839(J)
Gadolinium isotopes $Gd^{157}$
magnetic moment of, from hfs measurements, δ: 3839(J)
Gadolinium isotopes $Gd^{160}$
binding energy, calculation, δ: 333(J)
Gadolinium−magnesium alloys
magnetic susceptibility, δ: 6331(J)
Gadolinium nitrate crystals
paramagnetic resonance absorption in single, δ: 6572(J)
Galena
flotation, depressant action of tannic acid and quebracho in, δ: 890
flotation, inorganic depressants for, δ: 894
Gall bladder
functional studies with labeled contrast media, δ: 4377(J)
Gallium
bone deposition, effects of Vitamin D on, δ: 2838(R)
chemistry, metabolism, and toxicity of, review, δ: 1106(J)
colorimetric and fluorimetric determination in urine, δ: 5538
distribution coefficient in β,β′-dichlorodiethyl ether−HCl system, δ: 1424(R)
distribution in bones and tissues, δ: 494
dosage determinations and toxicology, δ: 527
hyperfine structure, effects of configuration interaction on, δ: 3680(J)
neutron resonance cross sections, δ: 1304(R)
nuclear moment factor in $p_{\frac{1}{2}}$ state, δ: 4627(J)
sources of, and recovery from flue dusts and germanite, δ: 1692(J)
thermodynamic properties, δ: 2589
ultraviolet absorption spectrum, δ: 3727(J)
urinary excretion of, tracer studies, δ: 5538
Gallium (liquid)
as reactor coolant, corrosive and thermal properties, δ: 2079
thermodynamic properties, δ: 2589
viscosity, temperature dependence of, δ: 6031(J)
Gallium alloys (liquid)
as reactor coolant, corrosive and thermal properties, δ: 2079
Gallium−bismuth−lead−tin alloys
preparation, δ: 4309(P)
Gallium chlorides
solvent partition in HCl−β,β′-dichlorodiethyl ether system, δ: 4724(R) 5298(R)
Gallium citrates
preparation, δ: 494
Gallium isotopes
decay schemes of $Ga^{66}$, $Ga^{67}$, and $Ga^{68}$, δ: 5513(J)
Szilard-Chalmers concentration, δ: 4017(J)
Gallium isotopes $Ga^{66}$
nonexistence of 40-min activity, δ: 5513(J)
Gallium isotopes $Ga^{67}$
half-lives measured by differential ionization method, δ: 1357(J)
Gallium isotopes $Ga^{69}$
nuclear magnetic resonance absorption-line broadening in metal, δ: 6445(J)
quadrupole moment calculated from hfs, δ: 3680(J)
Gallium isotopes $Ga^{71}$
nuclear magnetic resonance absorption-line broadening in metal, δ: 6445(J)
quadrupole moment calculated from hfs, δ: 3680(J)
Gallium isotopes $Ga^{72}$
diagnostic and therapeutic uses in bone malignancy, δ: 1106(J)
dosage determinations and physiological effects, δ: 527
Gallium oxides
thermodynamic properties of β, δ: 2591
Gamma absorption cross sections
(See also as subheading under specific materials.)
for L shell of Au, Ag, Pb, U, δ: 6182(J)
measurement by photonuclear detector method, δ: 334
measurement with scintillation counter, δ: 5689(J)
Gamma cross sections
(See also appropriate subheadings under specific elements and isotopes.)
derivation of integrated, from neutron yields, δ: 2495(J)
for high-energy reactions not involving pion production, theory, δ: 5471
measurement, δ: 373(J), 963, 2167, 2464
from relative-yield measurements, tables, δ: 5676(J)
theory of electrical dipole, δ: 1013(J)
Gamma decay
(See also appropriate subheadings under specific materials.)
of $Br^{80m}$, average charge of $Br^{80}$ atoms following, δ: 5697
Gamma emission
(See also appropriate subheadings under specific materials.)
decay of spontaneous, theory, δ: 3711
Gamma radiation
(See also Photons; X radiation.)
absorption, δ: 1533
absorption coefficients for, experimental and theoretical, δ: 5217(J)
absorption coefficients for, in range 0.1 to 6 Mev, δ: 4809(J)
absorption coefficients for various materials, δ: 5689(J)
absorption in air and tissue, comparison, δ: 5270(J)
absorption in Pb, δ: 6381(J)
absorption in Pb and U, δ: 680(R), 1543
absorption in moist sand, δ: 296(R)
absorption for thickness measurements, δ: 937
accompanying K capture of $Fe^{55}$, δ: 434(J)
from americium ($Am^{241}$), δ: 413
angular correlations of, from $Cd^{111}$, δ: 347(J), 417(J)
angular correlations of, from $Ta^{181}$, δ: 6624(R)
angular correlations of, in a cascade, δ: 339, 2171(J)
angular correlations of successive quanta emitted by aligned nuclei, δ: 5236(J)
angular distribution and polarization of, emitted by aligned nuclei, δ: 5237(J)
angular distribution of, from polarized nuclei, δ: 1842(J)
angular distribution of, from the reaction $F^{19}$ $(p,\alpha\gamma)O^{16}$, δ: 4635(J)
angular distribution of secondary, from (n,γ) in reactor shields, δ: 1342
anisotropy of, from $Co^{60}$, δ: 997(J)
attenuation in air, measured from airplanes, δ: 3182(R)
chemical effects on aqueous phenol and benzene, δ: 2045(J)
chemical effects on water, δ: 144(J), 1678
Cherenkov radiation induced in water by, δ: 5509
coagulation of colloids by, δ: 2331(J)
coherent scattering by bound electrons, calculation for near-relativistic region, δ: 5693(J)
in cosmic radiation, δ: 612(J)
counting with hydrogenous liquid phosphors, δ: 2133
counting with liquid phosphors, δ: 4577
detection efficiency of organic phosphors for, δ: 2719(J)
detection and measurement, δ: 296(R), 313(J), 409, 650(R), 1802(R), 1907
detection and measurement, counter for, δ: 5417(R)
detection and measurement, design of NBS model 1 survey instrument for, δ: 3627
detection and measurement, review of instruments for, δ: 6129(J)
detection and measurement by slit ionization chamber, δ: 3640(J)
detection and measurement from Ra, δ: 1960(J)
detection and measurement of high intensity, instruments for, δ: 6662
detection and measurement up to 100 kev with proportional detectors, δ: 5698
detection of circularly polarized, δ: 1014(J)
detection with LiI ($SnI_2$) phosphor, δ: 3009(J)
detection with polyvinyl chloride films, δ: 660(J)
deuteron photodisintegration by, δ: 3669(J)
deuterons and protons produced by, on Cu, δ: 1532
development of nuclear emulsion after exposure to intense, δ: 6667(J)
diffusion in matter, δ: 382
diffusion in water, δ: 5218(J)
distribution function arising in studies of, bounds to, δ: 5489
Doppler effect for 4.5- and 4.8-Mev, use in measuring γ-ray life-times, δ: 6161(J)
dosage determination, δ: 6497(R)
dosage determination by thermoluminescence, δ: 6617
dosage determination in presence of β particles, δ: 6421(J)

Gamma radiation (cont'd)
dosage determination in standard tissue, 6: 1508
dosage needed to kill bacteria, determination, 6: 5935
dosimetry in radiological warfare, 6: 2269
drill-hole logging with theory, 6: 1459
effects of animal size on lethal effects on burros and swine, 6: 5940(R)
effects of large doses on burros, 6: 5268(J)
effects of spectrum on transmission through Al and Pb, 6: 6466(J)
effects on anterior segment of the eye, 6: 3931(J)
effects on biochemical oxidation of domestic sewage, 6: 1597
effects on enzymes, 6: 40(J)
effects on gastric secretion, 6: 4360(J)
effects on immune mechanisms in mice, 6: 6246(J)
effects on liquids, 6: 556
effects on optical transmission of Ce-stabilized glass, 6: 5908
effects on organic compounds, bibliography, 6: 6008
effects on organic liquids, measurement of, 6: 145(J)
effects on polymerization of ethylene, 6: 5754(R)
effects on susceptibility and immunity to trichinosis, and on leukocyte count, 6: 5261
effects on vapor-phase polymerization of acetylene and ethylene, 6: 3762(R)
elastic scattering by Coulomb field, 6: 3421(J)
elastic scattering by K electrons of Pb, calculations, 6: 6185(J)
electron scattering by, variation of Klein-Nishina formula with $\gamma$ energy, 6: 5894
energy and angular distribution of, from $Li^7(p,\gamma)$, 6: 2191(J)
energy from conversion electron and x-ray-absorption energies, 6: 2529
energy resolution of by NaI scintillation detector, 6: 6415(R)
heating produced by, emitted in thermal-neutron capture, 6: 4965
from heavy nuclei in relation to vibration-rotation spectra, theory, 6: 981(J)
histological effects of repeated low doses on mice, 6: 1606(J)
history, 6: 712(J)
from inelastic-scattering processes, angular distribution according to statistical model, 6: 5675(J)
intensity and internal conversion of, from $Bi^{214}$, 6: 4278(J)
interactions with orbital electrons, and decay of spontaneous emission, 6: 3711
internal conversion of, transitions, in the L sub-shells, 6: 3435
internal pair production by, 6: 5234(J)
Joshi effect of, 6: 3710(J)
K to L absorption ratio, 6: 2766(J)
lethal dosage determinations, 6: 3896(R)
lethal dosage determinations for mice, 6: 506(R)
lethal effects on microorganisms, 6: 6495
meson production in D and H by, 6: 3040(J)
motion-picture film on properties, 6: 5458(J)
multiple Compton scattering of low-energy, theory, 6: 2762(J)
multipolarity, method for direct measurement of, 6: 5179
mutations induced by, effects of streptomycin on, in E. coli, 6: 4366(J)
neutron and proton yields from, on Si and Mg, 6: 1874(J)
nuclear photodissociation by high-energy, 6: 3409(J)
nuclear reactions, 6: 6620(R)
nuclear reactions, identification in nuclear emulsions, 6: 4943
nuclear reactions and stars produced by, 6: 1861
nuclear reactions at high energy, theory, 6: 5471
nuclear reactions $(\gamma,n)$, 6: 2491(J)
nuclear reactions $(\gamma,n)$ and $(\gamma,p)$, statistical analysis of, 6: 1858
output, depth dose, and isodose distributions of, from 1000-c $Co^{60}$ teletherapy unit, 6: 6517
oxidation and reduction produced by, 6: 2215(J)
oxidation of ferrous sulfate solutions by, 6: 2625(J)
pair production by, dependence on Z, 6: 402(J)
pair production by, detection of, 6: 655
pair production by, measurement with lens spectrometer, 6: 3107
pair production cross sections, dependence on Z, 6: 6471(J)
pathological effects on Tradescantia, 6: 5936
physiological effects of external exposure to, 6: 3896(R)
physiological effects on rat thymus, 6: 6264(J)
plane polarization of, from the reaction $H^2(p,\gamma)He^3$, 6: 4636(J)
polarization and angular correlation of, from $Rh^{106}$, $Co^{60}$, and $Cs^{134}$, 6: 430(J)
polarization by Compton scattering, 6: 3427(J)
polarization of doubly scattered, 6: 1898(J)
from proton bombardment of $Be^9$, 6: 405
reduction of ceric sulfate solutions by, 6: 2628(J)
reflection from quartz, 6: 444(R)
response of ionization chambers to, 6: 5831(R)
scattering mathematical analysis, 6: 1285
scattering from wood, Al, and Pb, 6: 6621(R)
scattering in Pb, 6: 3093(J)
Gamma radiation (cont'd)
scattering of circularly polarized, in magnetized Fe, 6: 2763(J)
scattering of 17-Mev, by Bi, Cu, Pb, and Sn, 6: 5899(J)
secondary-electron emission from absorption of, effective atomic numbers for, 6: 5223(J)
secondary electronic emission due to, 6: 404(J)
selection rules for, effect of charge independence of nuclear forces on, 6: 5667(J)
selection rules for, effect of symmetry properties of nuclear states on, 6: 5667(J)
theory, 6: 983(J)
total linear absorption coefficients for various types of media for, 6: 4279
transmission, mathematical analysis, 6: 1285
transmission through concrete and Pb, buildup factors for, 6: 2768(J)
transmission through finite slabs, 6: 5662
velocity, 6: 2983(J)
Gamma shielding
(See also as subheading under apparatus or material shielded.)
design, 6: 1360, 1582(P)
Gamma sources
availability and radiographic application, 6: 4772(J)
calibration, 6: 2569(R), 3889(R)
$Co^{60}$ as, for irradiation of growing plants, 6: 5009
design and construction of $Co^{60}$, for 1000-c teletherapy unit, 6: 5289
design and performance of $Co^{60}$, for laboratory use, 6: 6648
design for industrial uses, 6: 6497(R)
design of $Co^{60}$, for radiation exposure chamber which also contains fast neutron source, 6: 4689(R)
design of $Co^{60}$, for sterilizing foods, 6: 3889(R)
design of $Co^{60}$ therapeutic unit at Saskatchewan, 6: 3926(J)
dosimetric study, 6: 6662
evaluation of $I^{192}$ as, 6: 2366
exposure chamber to house a 100-curie $Co^{60}$ source, design, 6: 3344
installation and testing, 6: 2039
monitoring of, scintillation detector for, 6: 5834
multicurie $Cs^{137}$ teletherapy unit, design data for, 6: 5960
output, depth dose, and isodose distributions from 1000-c $Co^{60}$ teletherapy unit, 6: 6517
in photosynthesis of ammonia, phenol, and sulfur trioxide, 6: 5353
preparation and industrial uses, 6: 1552(R)
uses of Rn, $W^{187}$, Th, and $Ir^{192}$ as, 6: 446(R)
Gamma spectra
(See also as subheading under specific elements and isotopes.)
accompanying $\beta$ decay, contribution of nuclear radiation to, 6: 6715(J)
mathematical analysis, 6: 1285
measurement, multiple-crystal spectrometer for, 6: 3875
measurement with scintillation detectors, 6: 307(J)
from proton bombardment of C, 6: 362
Gamma spectrometers
anticoincidence scintillation, design and operation of, 6: 2708
auxiliaries for, 6: 4579(R)
calibration, 6: 444(R), 4579(R)
design and performance, 6: 647, 1803(J), 1861
multiple-crystal, design and performance, 6: 3875
operational characteristics, 6: 3665
pair measurement of $\gamma$ rays with, 6: 3107
photocathode multiplier tubes for use in, design, 6: 6396(R)
resolving power, measurement, 6: 3726
scintillation, line shape of monochromatic $\gamma$ rays in, 6: 5644(J)
scintillation, pulse height vs. energy response of, 6: 2145(J)
scintillation counter as, 6: 4148(J)
stability, 6: 1802(R)
Gas analyzers
(See also Infrared gas analyzers.)
electronic design, 6: 576(J)
Gas flow
(See also Air flow; Convection (forced); Convection (free); Supersonic flow.)
analytical control, apparatus for, 6: 462(P)
in constant-area passages with friction and arbitrary heat addition, mathematical analysis, 6: 4046
equations for, 6: 2070(J), 4051(J)
kinetics, 6: 624(J)
mass flowmeters for measurement of, design, 6: 1185
mechanics and thermodynamics of steady one-dimensional, with tables for numerical solutions, 6: 5361
molecular, effect of intermolecular collision on, 6: 6646(J)
motion of solid particles in, 6: 188(J)
through porous glass, 6: 4766
in a porous medium, 6: 190(J)
turbulence of, effect of dust concentration on, 6: 189(J)
Gas flow (turbulent)
density fluctuations and gravitational instability in, 6: 1276(J)

Gas flow (turbulent) (cont'd)
density fluctuations in, 6: 1277(J)
heat transfer coefficients for, determination, 6: 2067
velocities in, frequency distributions of, 6: 331(J)
Gas turbine engines
design and performance, 6: 2647
subsonic through flow in axial-flow, matrix and relaxation solutions for determining, 6: 5360
Gaseous diffusion process
cascade studies, theory, 6: 5423
interstage flow in separating cascade with by-passing reflux stream, estimation of, 6: 6110
separation of gases by means of porous glass, 6: 4766
Gaseous discharge
(See Electric arcs; Gaseous ionization; Glow discharges.)
Gaseous ionization
(See also subheading ionization under gaseous materials.)
by alpha particles in cloud chamber, mechanisms, 6: 5449(J)
average velocity of energy transfer in ionized medium, 6: 6393(J)
conference on dynamics of ionized media, University Coll., London, England, April 1951, proceedings, 6: 1752
detection with photomultiplier, 6: 5833(R)
effects of radiation on, 6: 916(R)
in hydrogen and microwave discharge, 6: 4085(R)
measurement of discharge admittance and electron density, 6: 6095(J)
relative, by low energy protons, deuterons, and $\alpha$ particles, 6: 3707(J)
self-magnetic field in, 6: 1274(J)
statistical theory of, in stellar interiors, 6: 3591
theory, 6: 722(J)
Gaseous ions
charge exchange cross sections of positive, in collision with atoms, 6: 4847(J)
electron detachment cross sections of negative, in collision with atoms, 6: 4847(J)
properties of, at microwave frequencies, 6: 4111
Gases
(See also specific gaseous substances.)
adsorption, percolators for, 6: 5815
adsorption on solids, theory, 6: 5349(R)
analysis of, bibliography, 6: 110
analysis of, continuous, 6: 462(P)
analysis of, review, 6: 2970(J)
analysis with a vacuum gauge, 6: 587(J)
back diffusion in seals, 6: 2123
collection and purification of natural and volcanic, for isotopic abundance studies, 6: 5142(J)
compressibility, apparatus for measuring, 6: 187(J)
condensed in capillaries, flow of, 6: 3612(J)
cooling of a porous heat source by, 6: 1197
decontamination, filters for, 6: 2913(R)
detection, manual for UCRL portable vapor detector model 1EPS, 6: 5420
detonation and ignition, 6: 916(R)
diffusion, hydrodynamic equations for, 6: 622(J)
diffusion and self-diffusion coefficients, 6: 4117(J)
diffusion coefficients, from evaporation rates, 6: 4554(J)
diffusion coefficients of noble, 6: 4565(J)
diffusion through micropores, 6: 3612(J)
drying by passing through NaK trap, 6: 5335
electrical breakdown, theory, 6: 5414(J)
electrical discharges in, mathematical theory of, 6: 3611(J)
energy loss per ion pair of electrons in, 6: 2122(J)
equations of motion in viscous, 6: 624(J)
flow through plastic membranes, 6: 4113
fluorescence excited by $\alpha$ particles in, 6: 2521(J)
high-frequency discharge breakdown, 6: 2968
infrared spectra, 6: 4114
intermolecular force and coefficient of self-diffusion, 6: 6103(J)
ionization, apparatus for measuring, 6: 650(R)
ionization, space distribution of, 6: 6624(R)
liberation by laminarly flowing fluids, 6: 1205(J)
low-temperature second virial coefficients, calculation, 6: 4551, 4552
mass spectrographic determination of impurities in, 6: 1006
mass spectrographic determination of impurities in, separable by condensation, 6: 3521
monitoring for radioactivity, ionization chamber for, 6: 4333(P)
purification with alkali metals, apparatus for, 6: 5336
pyrometry, 6: 4114
radial distribution function of hard-sphere, and the superposition approximation, 6: 2692(J)
radiological monitoring of, equipment for, 6: 482(P)
range-energy relations for protons in, 6: 2198
separation by plastic membranes, 6: 4553(J)
Gases (cont'd)
sorption on metal powders, 6: 5759
thermal conductivity at moderate pressures, 6: 6395
thermal convection in, 6: 623(J)
thermo-osmosis through membranes, 6: 1775(J), 1776(J)
transport properties, relationship between, 6: 1774
virial equation of state for, 6: 2124
viscosities of mixtures, calculation, 6: 4118(J)
Gasket materials
degasification, 6: 5486(R)
Gaskets
(See also Pipe joints; Seals and glands.)
outgassing properties, 6: 2586
Gastric juice
gamma radiation effects on secretion of, 6: 4360(J)
Gastro-intestinal tract
nucleoprotein changes in, following total body x irradiation, 6: 6242
transit in, measurement, 6: 13
Geiger-Mueller tubes
(For detection instruments using Geiger-Mueller tubes see also Radiation detection instruments.)
aging characteristics, 6: 3002
automatic tester for, design, 6: 2414
backscattering correction in windowless gas-flow, 6: 4660
base, socket, and neoprene protector for, design, 6: 2709
breakdown potentials in, 6: 5154(J)
bromine-filled, for $\beta$ and $\gamma$ prospecting, 6: 4873(J)
calibration with $K^{40}$, 6: 667(J)
counting efficiency increase by backscattering beta rays within the tube, 6: 1504
counting losses in, for x-ray measurements, 6: 4161(J)
delay times in, 6: 3359(J), 3362(J)
design, 6: 755(J)
design, history, and performance, 6: 4160(J)
design of 4 $\pi$, 6: 3823(J)
dipping type, thin windows for, 6: 4159(J)
discharge-control circuit for, 6: 2447(J)
discharge lag in, 6: 3361(J)
discharge mechanism in A-filled, 6: 658(J)
dissociation of ethyl acetate in, 6: 312(J)
electron-emission coefficients of fillers and effects of aging, 6: 3646(J)
electron transit time in argon-alcohol-filled, 6: 3013(J), 4892(J)
electron transmission through zapon windows of, 6: 4968(J)
electron velocities of various gas mixtures used in, 6: 3358(J)
gas analysis in, by mass spectroscopy, 6: 2990
internal, for absolute $\beta$ counting, 6: 5166(J)
for liquid samples, design and performance, 6: 659(J)
for low-intensity $\gamma$ radiation, design, 6: 6621(R)
low-pressure alcohol-argon, for counting $CO_2$, 6: 663(J)
dead time determinations in maintaining constant geometry for, 6: 2440(J)
Maze-type, with fillings possessing low temperature coefficients, plateau changes in, 6: 1296(J)
miniature, design for medical use, 6: 4153(J)
performance of organic-vapor- and halogen-quenched, 6: 5451(J)
pulsed, operation and performance of, 6: 5641
pulses from, under minimum load conditions using oscillographic techniques, 6: 1800
for range 125 to 300 v, 6: 6227(P)
response, 6: 3387(R)
response at moderately high rates, reliability of, 6: 2152(J)
scintillation-type, response as function of source position, 6: 5165(J)
self quenching in, 6: 970(J)
shielded, for routine $C^{14}$ age measurements, 6: 4882(J)
short double coincidence resolving times for, 6: 3360(J)
slow discharge in nonself-quenching, 6: 310(J)
space charge sheath of the Geiger counter, characteristics of, 6: 6666(J)
statistical analysis of measurements obtained by, 6: 2426(J)
for total activity measurements, 6: 6232(P)
types and applications in radiotherapy, 6: 3357(J)
window transmission, measurement of, 6: 5162(J)
for x-ray intensity measurements, design, 6: 2128(J)
xenon-ether-filled, properties of, 6: 1290(J)
Gels
(See Colloids.)
General Electric Research Lab.
progress reports, 6: 1239(R), 1475(R), 2932(R), 3791(R), 5610(R)
General Engineering Lab., General Electric Co.
progress reports, 6: 3295(R)
Genetics
(See also as subheading under specific organisms; see also Cytogenetics.)
effects of pelvic irradiation in women studied in the third generation, 6: 6260(J)
effects of radiation on factors in, review, 6: 4371(J)

Genetics (cont'd)
effects of recessive lethal factors on viability of heterozygotes in D. melanogaster, 6: 2556
mutations and rate processes theory, 6: 6
radiation factors affecting, 6: 769(J), 773(J)
reversion in biochemical mutants of Neurospora, mechanism of, 6: 5018(J)
sexual isolation by artificial selection in Drosophila, 6: 6237
Geological Survey
progress reports, 6: 1454(R), 1455(R)
Geology
(See also as subheading under specific materials.)
age estimation with $C^{14}$, 6: 4882(J)
gamma logging, theory, 6: 1459
measurement of geologic time, bibliography on, 6: 4062
nomenclature for stratification and cross-stratification in sedimentary rocks, 6: 6054
Geophysics
earth age estimation by use of Pb isotope ratios, 6: 6357(J)
George Peabody Claims
torbernite occurrence, 6: 214
George Washington Univ.
progress reports, 6: 6579(R)
Germanium
colorimetric determination in biological materials, 6: 5739
crystals, structure and performance as neutron monochromators, 6: 6411
deuteron range-energy relation in, 6: 1032(J)
dielectric constant and conductivity of, in resonant cavity, 6: 4179(R)
dielectric constant and loss tangent, 6: 2166(R)
dielectric constant and resistivity, 6: 4085(R)
effects of $\alpha$ bombardment of n-p-n junction in, 6: 1045(J)
effects of radiation on properties, 6: 6705(R)
electric conductivity during neutron bombardment, 6: 1349(J)
electron-hole production in, by $\alpha$ particles, 6: 1044(J)
lattice defects induced in by electron bombardment, 6: 6706
localized electronic states in bombarded, 6: 557(J)
metabolism, 6: 5739
metabolism and tissue distribution, 6: 5724
neutron capture cross sections of, measured by pile-oscillation method, 6: 3426(J)
oxidation kinetics, 6: 2588
sources of, and recovery from flue dusts and germanite, 6: 1692(J)
thermodynamic properties, 6: 1641
tissue distribution, excretion, and toxicology, tracer studies of, 6: 5725
Germanium–aluminum–lithium alloys
phase studies, 6: 6366(J)
Germanium–aluminum–sodium alloys
phase studies, 6: 6366(J)
Germanium chlorides
reactivity of $Br^{80}$ with, effect of isomeric transition on, 6: 5752(J)
Germanium(IV) fluorides
infrared spectra, 6: 3130(J)
Germanium halides
thermodynamic properties, 6: 1641
Germanium hydrides
mass-spectrometric ionization, dissociation, and critical potential, 6: 5145(J)
Germanium hydroxides
solubility, 6: 1641
Germanium iodides
thermodynamic properties and spectra, 6: 1641
Germanium(IV) ions
distribution between aqueous HCl and $\beta,\beta'$-dichlorodiethyl ether, 6: 2586, 4724(R), 5298(R)
solvent partition, 6: 6531(R)
Germanium isotopes
mass, 6: 3054
Germanium isotopes $Ge^{74}$
neutron activation cross sections, 6: 3391
Germanium isotopes $Ge^{75}$
isomers, production and properties, 6: 4272(J)
Germanium isotopes $Ge^{77}$
decay schemes, 6: 3440(J)
isomers, properties, and decay schemes, 6: 2222(J)
Germanium oxides
analysis for As by radioactivation, 6: 3754
thermodynamic properties, 6: 1641
Germination
effect of fast neutrons on pine seed, 6: 6253(J)
Glass
(See also Borosilicate glass; Lead glass; Optical systems.)
for absorption of x rays and thermal neutrons, 6: 6470(J)
Glass (cont'd)
corrosion by $H_2O_2$, 6: 240(J)
decoloration kinetics of pile-irradiated, 6: 4980(J)
effects of $\gamma$ radiation on optical transmission of Ce-stabilized, 6: 5908
fading of blue, induced by x or $\gamma$ radiation, 6: 3709(J)
sorption of ions on, from aqueous solutions, 6: 2894(J)
surface tension, methods of measuring, 6: 202
wetting of metals by, 6: 201(R)
x ray mass absorption coefficients of elements and oxides used in, 6: 6698(J)
Glass electrodes
radiation effects on, 6: 3333
Glass wool filters
efficiency for chemical and laboratory hoods, 6: 6563
GLEEP
(British graphite low energy experimental pile.)
calibration, as standard of thermal neutron density, 6: 2180(J)
design, 6: 5248
kinetics, 6: 3444(J)
mean velocity of thermal neutrons in, 6: 2180(J)
Globulin
electrophoretic determination in blood and urine, 6: 1074
Glow discharges
from deuterium, photomultiplier tubes in recording of, 6: 4418
Glucose
determination in biological materials, glucose oxidase in, 6: 3965
determination of poly-, in blood and urine, 6: 1652
effect of x radiation on glycogenesis of, in guinea pig, 6: 3910(J)
fermentation by Leuconostoc mesenteroides, 6: 165
fermentation by Rhizopus oryzae, 6: 3148
fluorimetric analysis, 6: 1134
metabolism in bacteria, effects of enzymes on, 6: 5930
metabolism in biosynthesis of formates, 6: 2837
metabolism in canna leaves, tracer study, 6: 6523
metabolism in human erythrocytes, 6: 4719
metabolism in rat liver, 6: 758
metabolism in x-irradiated yeast, 6: 510(R)
synthesis of 6-$C^{14}$-labeled D-, 6: 5762(J)
synthesis of labeled, 6: 1430
uptake of $C^{14}$ from, by amino acids in mouse brain, 6: 72(J)
Glucose (labeled)
isomerization in $D_2O$, 6: 2023(J)
Glucose phosphates
exchange of P of, with inorganic phosphate, 6: 802
Glutamic acid
biosynthesis in A. serogenes, 6: 2581
determination by $N^{15}$ isotope dilution, 6: 819(J)
synthesis of $C^{14}$-labeled, 6: 4463(J)
Glutamine
biosynthesis of $C^{14}$-labeled, by sugar beets, 6: 6341(J)
Glutaric acid, $\alpha$-oxo-
conversion to malic acid in pigeon breast muscle, 6: 1620(J)
Glutathione
effects of radiation on aqueous, 6: 2888(J)
protective effects against radioinduced chromosome aberrations, 6: 2255
Glyceric acid
exchange of P of, with inorganic phosphate, 6: 802
production in photosynthesis, 6: 167
synthesis of $C^{14}$-labeled Ca salt of, 6: 4028(J)
Glycerides
synthesis, 6: 1120
Glycerol
degradation in egg yolk, 6: 2578
metabolism by liver in vitro, tracer studies, 6: 5036
Glycerophosphates
effect on calcification of bone, 6: 21(J)
Glycine
incorporation into protein of human liver slices, 6: 2846(J)
incorporation of $\alpha$-C atom into hemoglobin, rate of, 6: 5295(J)
metabolism, 6: 4691(R)
metabolism in biosynthesis of formates, 6: 2837
Glycine, phthalyl-, ethyl ester (labeled)
infrared spectra, 6: 1696(J)
Glycogen
biosynthesis hormonal effect on, 6: 758
muscular, effects of x irradiation on synthesis in guinea pig, 6: 3905(J)
storage in liver, effects of radiation on, 6: 56(J)
Glycolic acid
hydrogen-deuterium exchange in aqueous, 6: 3981(J)
metabolism in biosynthesis of formates, 6: 2837
preparation of $C^{14}$-labeled Ca salts of, 6: 4452(J)
production in photosynthesis, 6: 167

Glycolysis
in mammary carcinomas, 6: 1091(J)
Glyoxime, dimethyl-
chelation, 6: 6535
crystal structure determination, 6: 2117
Glyoxime, dimethyl-, ethers
chelation, 6: 6535
Glyoxime, dimethyl-, nickel derivatives
crystal structure, molecular structure, synthesis, 6: 6549
preparation as samples for $Ni^{63}$ self-absorption analysis, 6: 4650(J)
Glyoxylic acid
metabolism in biosynthesis of formates, 6: 2837
synthesis of $C^{14}$-labeled from methanol $C^{14}$, 6: 4025(J)
Gold
absorption of $Co^{60}$ $\gamma$ rays in, 6: 2203(J)
atomic weight, 6: 3972(J)
deuteron range-energy relation in, 6: 1032(J)
dimensional changes normal to the direction of diffusion of, 6: 2106
electric conductivity, effects of deuteron bombardment on, 6: 2214(R)
electric conductivity, effects of plastic deformation on, 6: 241(J)
electron multiple scattering in, 6: 5502(J)
electron scattering by, 6: 1035(J), 1036(J)
electron single scattering by, 6: 5220(J)
gamma absorption by, ratio of K to L, 6: 2766(J)
gamma absorption in L shell, 6: 6182(J)
heat of solution, 6: 4507(R)
neutron inelastic-collision cross sections, 6: 5214
neutron low-energy resonances in, 6: 5427
neutron total cross sections as function of wavelength, 6: 3674
pair-production and Compton scattering in, 6: 4967(J)
proton scattering by, 6: 2710
radiation damage and recovery in, 6: 4978(R)
secondary-electron emission from, under $N_2$-ion bombardment, 6: 5486(R)
tissue distribution, 6: 3156
tissue distribution, as affected by sub-total hepatectomy, 6: 1379(R)
tissue distribution of colloidal, tracer studies, 6: 4379(J)
wettability, by glasses, 6: 201(R)
wettability by sodium silicates, 6: 4780
Gold–cadmium alloys
phase studies, 6: 1238(R), 3787(R)
phase transformations, effect of stress on, 6: 5781(R)
phase transformations and thermal expansion, 6: 600(R)
Gold–copper alloys
activity coefficients, 6: 2932(R)
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
distribution of colloids coated with Ag in lungs and associated lymphatics, therapeutic implications of, 6: 2575(J)
effects of radiation on resistivity, bibliography, 6: 5787(J)
electric conductivity, effects of radiation on, 6: 2771
ordering kinetics in, 6: 115, 4781
relative ordering rates in superlattice, effects of cold working, irradiation, and heat on, 6: 3574
Gold–copper compacts
radiation effects on intermetallic diffusion in, 6: 3783
Gold–copper couples
radiation effects on intermetallic diffusion in, 6: 3783
Gold–iron alloys
phase studies, 6: 1467(R)
Gold isotopes
alpha emission from, 6: 410, 1556
separation, 6: 3156
separation from deuteron-bombarded Pt and identification, 6: 153
Gold isotopes $Au^{195}$
conversion electrons accompanying decay of, 6: 4270(J)
decay scheme, 6: 1925(J), 3783(J)
electron emission spectra, low-energy, 6: 3872(J)
Gold isotopes $Au^{196}$
gamma emission accompanying $\beta$ decay of, 6: 5705(J)
Gold isotopes $Au^{197}$
decay schemes, 6: 1925(J)
energy levels, 6: 2536(J)
gamma reactions $(\gamma, \gamma)$ and $(\gamma, n)$, 6: 365(J)
internal conversion in, accompanying $Pt^{197}$ decay, 6: 4270(J)
internal conversion in, due to interaction of L sub-shells, 6: 6079
nuclear electric moments, 6: 996(J)
nuclear magnetic moment, 6: 3677(J)
Gold isotopes $Au^{198}$
beta spectrum, 6: 5511(J)
colloids of, effects of particle size on blood clearance and tissue distribution, 6: 6297(J)
colloids of, effects on tumor cells, 6: 5945(J)
colloids of, factors affecting tissue distribution, 6: 2559(R)
Gold isotopes $Au^{198}$ (cont'd)
colloids of, in palliative treatment of patients with malignant pleural and and peritoneal effusions, 6: 5962(J)
colloids of, preparation and particle size measurements, 6: 6302(J)
colloids of, techniques and radiation precautions for intratumoral injection, 6: 6289(J)
colloids of, tissue distribution, 6: 3507(J)
colloids of, tissue distribution and radiation effects after injection into brain in therapy of intracranial tumors, 6: 6287(J)
colloids of, tissue distribution and radiation effects in joints, 6: 6507(J)
colloids of, in treatment of pleural effusions and ascites associated with malignancy, 6: 6288(J)
colloids of, in treatment of prostate carcinoma, 6: 6281(J)
decay schemes, 6: 435(J)
decay schemes, scintillation spectrometer study, 6: 6189
effects of radiation internally administered on blood coagulation, 6: 6250(J)
electron emission spectra, low-energy, 6: 3872(J)
handling, for therapeutic purposes, 6: 5032(J)
internal-conversion coefficients, 6: 2146(J)
internal conversion of $\gamma$ rays accompanying $\beta$ decay of, 6: 5511(J)
neutron absorption cross sections, 6: 5511(J)
pathological effects of colloidal, 6: 4357(R)
properties and handling during therapeutic administration, 6: 5286
radioapplicator for, design, 6: 2275(J)
tissue distribution, 6: 4694(R)
tissue distribution and toxicology, 6: 3888(R)
in treatment of abdominal carcinomatosis, 6: 3507(J)
in treatment of carcinomas, 6: 2831(J)
in treatment of leukemia, 6: 2277(J)
in treatment of lung cancer by intracavitary administration following pneumonectomy, 6: 5959
Gold isotopes $Au^{199}$
conversion electrons accompanying decay of, 6: 4270(J)
decay scheme, 6: 1925(J), 3873(J)
electron emission spectra, low-energy, 6: 3872(J)
Gold–nickel alloys
constitution diagrams, 6: 5782(R)
phase studies, 6: 1467(R)
thermodynamic properties, 6: 4794(R), 5782(R)
Gold–silver alloys
diffusion in, 6: 603(R)
heats of formation and solution, 6: 4507(R)
self-diffusion, 6: 5388(R)
Gold–silver couples
porosity of, metallographic studies, 6: 1474
Gold single crystals
sintering, 6: 603(R)
Gold–titanium compounds (intermetallic)
crystal structure, 6: 3975(J)
Gonadotropic hormones
effects on biosynthesis of testosterone, 6: 173(J)
Gonadotropins
effects of radiation, and ultraviolet light on, 6: 772(J)
Gonads
beta-particle dosage determinations in, of $P^{32}$-labeled Drosophila, 6: 5937
castration effects on radiation-induced activity of thyroid gland, 6: 5012(J)
effects of x radiation on, in fish, 6: 5020(J)
pathological effects of radiation on, 6: 5716(R)
Goniometers
design and operation of, for use with x-ray-diffraction microcameras, 6: 4851
design for microscopes, 6: 2142
spiral-scanning x-ray-reflection, for determination of preferred orientations, 6: 5634
x-ray-spectra, for recording x-ray-diffraction patterns, 6: 4560
Goodrich, B. F., Co.
progress reports, 6: 3126(R)
Grain-boundary diffusion
(See also as subheading under the specific crystalline material.)
theory, 6: 5109(R), 6608
Grain structure
(See also the appropriate subheadings under specific materials.)
boundary diffusion, theory, 6: 5392(J)
Granite
uraniferous, in Wind River Basin, Wyo., 6: 6056
Grant District (N. Mex.)
geophysical exploration, 6: 6355
Graphite
(See also Carbon.)
activation energy for flow of electric current in, 6: 1239(R)

Graphite (cont'd)
adsorption isotherms of methane on, 6: 3247(J)
adsorption of O on, as factor in combustion, 6: 1669(J)
adsorptive properties, effects of radiation on, 6: 6186
analysis by pile oscillation method, 6: 697(J)
compression properties, 6: 1721
conduction electronic energy levels in, calculation, 6: 3246
corrosion by $H_2O_2$, 6: 240(J)
crystal structure, 6: 1161(J), 1162(J)
diffusion length of thermal neutrons in, 6: 3844
dynamic corrosion and mass transfer by liquid Bi, 6: 6321
effects of $\alpha$ particles on structure, 6: 4007(J)
effects of dust on lungs, 6: 3511(J)
effects of grinding on crystalline perfection, 6: 3996(J)
electric and thermal conductivity and thermoelectric power, 6: 5576
electric conductivity, 6: 1260
electron distribution in, 6: 493(J)
evaporation mechanism for, 6: 4432(J)
fabrication into molded pieces, 6: 6006
lattice vibrations and specific heat, 6: 1414
low temperature specific heat, theory, 6: 3995
machining methods for, 6: 2358(J)
$\pi$ mesons from, by neutron reactions, 6: 2107
natural, sources and grinding, 6: 5577(J)
neutron scattering cross sections of, at 1.44 ev, 6: 3674
polycrystalline, temperature dependence of thermal conductivity of, 6: 3799(J)
polycrystalline, thermal dependence of elastic moduli of, 6: 2325(J)
preparation, by thermal decomposition of hydrocarbon gases, 6: 6006
properties, review and bibliography, 6: 6322
as reactor moderator, 6: 1315
self-diffusion in, theory, 6: 1152
self-diffusion in, using $C^{14}$ tracer, 6: 4430
slowing down of fission neutrons in, 6: 4183
specific heat theory, 6: 2388(J)
spectral emissivity between 1285 and 2035°K, 6: 3559
spectrographic analysis for B, 6: 2897(J)
thermal capacity, 6: 5389(R)
thermal conductivity, 6: 3559
vapor pressure, 6: 4431(J)
vapor pressure and heat of sublimation, 6: 5334(J)
x-ray and neutron powder-diffraction intensities, 6: 5056(J)
Graphite compounds
superconductivity, search for, 6: 2324
Graphite crystals
interlayer binding in, 6: 2036(J)
Graphite moderated reactors
(See also specific reactors.)
design, 6: 1323
Grasshoppers
beta irradiation of neuroblasts of embryonic, apparatus for, 6: 3887(J)
binucleate cell formation in spermatocytes of, cinematography of, 6: 5714
Greases
(See also Lubricants; Oils; Vacuum systems.)
outgassing and vaporizing characteristics of, for vacuum applications, 6: 4489
Grignard reagents
preparation, 6: 92, 93
Ground waters
(See also Radioactive waters.)
movement of, tracer techniques in study of, 6: 4519(J)
Growth
(See also as subheading under plants and animals.)
effects of radiation on albino rat, 6: 5272
effects of radiation on protozoa, 6: 4692(R)
effects of radiation on rat, 6: 4693(R)
effects of single and periodic doses of x radiation on rat, 6: 6243
Guanine
synthesis of labeled, 6: 569(J)
Guinea pigs
effects of x radiation on mortality rates and clinical and blood pictures, 6: 6502(J)
hematological effects of x radiation on, 6: 1953(J)


## H


Hafnium
allotropic transformation, 6: 2865(J)
bibliography, 6: 5095
chemical properties, review, 6: 99(J)
chemical properties, occurrence, and preparation, 6: 2004(J)
determination by selenite method, 6: 1636
extraction with various $\beta$ diketones, 6: 4015
Hafnium (cont'd)
ion exchange properties, 6: 1636
neutron absorption by, reactor oscillator studies, 6: 4917(J)
neutron total cross sections as function of energy, 6: 5499(J)
separation from Zr, 6: 2004(J)
separation from Zr by ion exchange, 6: 844(J)
superconducting properties below 1°K, 6: 6371
Hafnium borohydrides
preparation, 6: 467(P)
Hafnium carbides
bibliography, 6: 5095
Hafnium chloride complexes
decomposition under reduced pressure, 6: 2342
Hafnium(IV) chloride complexes
thermal decomposition, 6: 1636
Hafnium chlorides
compounds with alkyl benzoates, heats of formation, 6: 1396(J)
reactions with phosphorus oxyhalogens, 6: 1636
Hafnium compounds
organic, preparation and properties, 6: 1636
Hafnium hydrides
preparation, 2004(J), 3958
Hafnium–hydrogen systems
x-ray diffraction study, 6: 3958
Hafnium isotopes
abundance limits, mass spectrographic determination, 6: 2987(J)
decay schemes, 6: 4247(R)
Hafnium isotopes $Hf^{175}$
decay schemes, 6: 1046
Hafnium isotopes $Hf^{176}$
energy levels, half life and spin, 6: 5664(J)
internal conversion and multipolarity of 89-kev $\gamma$ in, 6: 5664(J)
Hafnium isotopes $Hf^{177}$
angular correlations of $\gamma$ rays from, 6: 3688
gamma emission and properties of energy levels, 6: 2173(J)
Hafnium isotopes $Hf^{179}$
isomeric transition, 6: 409
Hafnium isotopes $Hf^{181}$
beta spectrum, 6: 5511(J)
decay schemes, 6: 650(R)
internal conversion of $\gamma$ rays accompanying $\beta$ decay of, 6: 5511(J)
radiations from, coincidence study of, 6: 2159(J)
Hafnium(IV) oxides
bibliography, 6: 5095
Hafnium silicates
bibliography, 6: 5095
Hafnium–zirconium alloys
activation analysis for Zr, 6: 5317(J)
constitution diagram, 6: 2865(J)
superconductivity, 6: 6624(R)
Hair
analysis for As by radioactivation, 6: 3756
graying in mice treated with x rays and radiomimetic drugs, 6: 2570(J)
Half lives
(See as subheading under specific isotopes.)
Halocarbons
(Compounds containing only C and halogens; see also specific compounds; see also Fluorohalocarbons.)
preparation of saturated, 6: 4302(P)
Halogens
thermodynamic functions, 6: 274
Halohydrocarbons
(Compounds containing only C, H, and halogens; see also specific compounds; see also Fluorohalohydrocarbons.)
effects of x radiation on, in alcoholic solution, 6: 1169(J)
Hamsters
lethal dosage determinations of x-radiation for, 6: 5716(R)
Handbooks and manuals
(See also the process or equipment concerned.)
on radiological health and related data, 6: 5949
Hands
effects of radiation exposure during oral radiography on, 6: 6254(J)
Hanford Works
waste disposal at, 6: 1211
Harmonic analysis
servo for analysis of spectra from scintillation spectrometer, 6: 5833(R)
Harvard Univ.
progress reports, 6: 5350(R)
Harvard Univ. School of Public Health
progress reports, 6: 3555(R)
Hawthorn Formation (Fla.)
occurrence of phosphate deposits in, 6: 5599

Health physics
(Covering very general papers; specific aspects of Health Physics are indexed separately, e.g., Radiation protection; Radiation detection instruments; subheading biological effects under various radiations; subheadings metabolism and toxicology under various materials.)
handbook on radiological health and related data, 6: 5949
laboratory manual used for reactor physics course at Oak Ridge School of Reactor Tech., 6: 6145
lecture series on, 6: 781
manual of radiological safety regulations of Bureau of Medicine and Surgery, Dept. of the Navy, 6: 5721
procedures for handling radioisotopes, review, 6: 5953(J)
standards of radiological protection and control, lecture on, 6: 1095
Health physics conferences
on handling radioactive materials, 6: 6510
Heart
blood plasma volume determinations in, 6: 5254
effects of radiation on K stores of, 6: 4352(R)
effects of x radiation on frog, 6: 3166(J)
effects of x radiation on isolated mammalian, 6: 2557(J)
output determined by a continuous recording system utilizing iodinated ($I^{131}$) human serum albumin, 6: 2579
output, tracer techniques in study of, 6: 3743
potassium content, effects of radiation on, 6: 5550(R)
Heart diseases
metabolism of $I^{131}$ in patients suffering from, 6: 2849(J)
Heat
diffusion from a line source in isotropic turbulence, 6: 4480
Heat capacity
(See as subheading under specific materials.)
Heat content
(See as subheading under specific materials.)
Heat exchangers
(See also as subheading under processes using heat exchangers, see also Heat transfer.)
for BEPO waste-heat utilization, 6: 5007(J)
design, 6: 1202(J)
design, selection, and installation of, for aircraft, 6: 865
efficiency of, using square fins on round tubes, 6: 5768
finned-circular-tube, performance, 6: 2850(H)
materials for, testing, 6: 1723
plate-fin type, heat transfer and flow friction performance, 6: 2648
surface friction, 6: 4045
Heat exchangers (gas-gas)
(See also Intercoolers.)
for large liquifiers, 6: 5591
Heat exchangers (liquid-liquid)
testing, 6: 3557(R), 6067(R)
Heat-resisting alloys
(See also specific alloys concerned.)
creep properties, effects of cold-work on, 6: 1207
fatigue at high temperatures, 6: 876
metallurgical and mechanical properties, 6: 596
Heat transfer
(See also appropriate subheadings under materials, units, and shapes; see also Boiling; Condensation; Convection; Heat exchangers; Thermal conduction; Thermal conductivity; Thermal radiation.)
aerodynamic, analysis about a flat plate parallel to direction of generating body force, 6: 2068
by air flow in an inconel tube, theory, 6: 866
in air flowing in circular tubes having square-thread-type roughness, 6: 5089
in air flowing in small tubes, 6: 4481
bibliographies, 6: 1720(J), 2359
between copper surface and liquid H and N, 6: 5593
determination of coefficients in turbulent fluid flow, 6: 3274(J)
determination of coefficients of wave transfer in a pipe, slit, and channel, 6: 4485(J)
effects of an electric field on, 6: 1203(J)
effects of surface boiling on, 6: 1443
equipment for testing, of liquid metals, 6: 186(R), 579
to and from flowing Hg, 6: 1199
in fluid flow, theory of, 6: 3275(J)
from a fluid in laminar flow to two parallel plane bounding walls, theory, 6: 4048, 4049
from a fluid in laminar flow to walls of a cylindrical tube, 6: 4050
by fluids flowing through porous materials, 6: 4486(J)
forced convection, to $H_2O$ at high pressures and temperatures, 6: 2649
in forced convection film boiling, 6: 6590
by forced convection in pipe system with volume heat source within the fluids, 6: 5091
by forced convection in Pt tubes, 6: 867
by forced convection in thermal entrance region, 6: 4482
Heat transfer (cont'd)
hydrodynamic theory of, relation to generalized integral ratios for boundary layers, 6: 6025(J)
in infinite medium heated by a sphere, 6: 6032(J)
in infinitely long concentric cylinders, theory, 6: 869
in inhomogeneous rods, theory, 6: 3562(J)
in isotropic turbulence, theory, 6: 2365(J)
in laminar region of air flow around cylinders of arbitrary cross section, 6: 4767
by liquid metals in annuli and circular tubes, 6: 1198
loss coefficients for abrupt changes in flow cross section with low Reynolds number flow in single and multiple tube systems, 6: 4045
measurement, and associated pressure drop in air flowing through smooth tubes under varying conditions, 6: 3268
measurement, instrument for, 6: 3271(J)
measurement of surface, by cyclic temperature variations, 6: 4479
mechanics and thermodynamics of steady one-dimensional gas flow with tables for numerical solutions for use in, 6: 5361
to mercury, 6: 5594
to molten Bi-Pb eutectic in turbulent pipe flow, 6: 2066(R)
in molten metals, theory, 6: 3560
by natural convection, effect of direction of heat flow on, 6: 2363(R)
from a porous heat source to a gas, theory, 6: 1197
in powders, theory, 6: 5096
pressure factors, 6: 5590
reactor tube size for specified, 6: 1709
in reactors, lecture on, 6: 1201
solution of equations for, in turbulent flow, 6: 6349(J)
to still air, by wires and cylinders, 6: 3272(J)
stresses and deformations in an elastic body with steady, 6: 3269(J)
temperature variations on infinite shell under discontinuous, 6: 3564(J)
between two phases kept at constant pressures, 6: 4115(J)
unsteady-state, solution of problems by method of Crank and Nicolson, 6: 3348
Heavy water
(See water-$d$; water-$d_2$; water-$l_2$.)
Heavy water reactors
(See also specific heavy water reactors.)
design, lecture on, 6: 1323
design of low power, at Chalk River, 6: 1854
multiplication factor and neutron flux distribution of, 6: 1854
Helium
(See also Alpha particles.)
alpha scattering cross sections, 6: 1033(J), 2201(J)
collision probability for low electrons in, 6: 1490
diffusion and excitation transfer of metastable, in normal, 6: 5415(J)
diffusion coefficients in, 6: 4565(J)
diffusion through Al, 6: 1745
diffusion through polymers, 6: 4112
disintegration by $\pi$-meson reactions, 6: 2194(J)
disintegration by neutrons, 6: 1004, 3580(R), 4223
electron scattering by, Oppenheimer approximation, 6: 4972(J)
electrons from, capture by slow protons, 6: 5616(J)
excitation by electrons, calculation of cross section, 6: 6175(J)
intermolecular forces, 6: 5175
ionization by $\alpha$ particles, 6: 5639(R)
ionization by $\alpha$ particles, effect of impurities on, 6: 6474
liquefier for, design of high-output, 6: 4089(J)
losses of, from minerals due to $\alpha$-damage on crystal structure, 6: 3570(J)
low pressure discharge, positive ions in afterglow of, 6: 4543
$\pi$-meson absorption and scattering in, 6: 1817
$\pi$ meson scattering by, 6: 315
$\pi$-meson reactions, 6: 5404(R)
$\pi$ mesons from, by photon reactions, 6: 324
neutron reactions, cloud-chamber study of, 6: 5510
neutrons scattered by, angular distribution, 6: 2471
permeation through stainless steel and inconel tubing, 6: 272
photodissociation proton energy spectra from, 6: 2483
polarization and scattering of protons by, 6: 1887
positron-electron scattering in, 6: 5492(J)
primary specific ionization in, at high energy, 6: 4832(J)
proton multiple scattering in, 6: 4235(J)
proton reactions ($p,\pi$), charge ratio of mesons produced, 6: 6626
proton scattering cross section, 6: 1040(J)
proton scattering differential cross section, 6: 6159(J)
ranges of fission products in, 6: 2504
thermodynamic properties at zero pressure, 6: 3803
wave functions and term values, 6: 4296(J)
Helium (liquid)
coexistence of He I and II, 6: 4088(J)
flow of He II around thermally conducting sphere, 6: 5124(J)
heat transport by adsorbed films of He II, 6: 5118(J)

Helium (liquid) (cont'd)
mass flow in adsorbed layers of, 6: 5120(J)
models of He II, relationship between Landau and London-Tisza, 6: 5401(J)
nondamping circular currents in He II, 6: 6379(J)
optical cell for use with, 6: 5794(J)
phase transitions in adsorbed layers of, 6: 5119(J)
radial distribution function and intensity of coherent scattering of radiation in, 6: 4233(J)
second sound in, thermal Rayleigh disk measurements of, 6: 2109(J)
second sound in mixtures of $He^3$ and $He^4$, 6: 5618(J)
specific heat, 6: 2109(J)
specific heat and entropy between 0.25 and 1.9°K, 6: 5122(J)
theory of, 6: 5793(J)
thermal conductivity of He I, 6: 5400(J)
thermodynamics of He I to He II transition in $He^3$–$He^4$ mixtures, 6: 6377(J)
transformation to solid at 1.6 to 4°K, 6: 4808(J)
transport phenomena of He II in slits, 6: 6378(J)
Helium–hydrogen systems
infrared absorption in, pressure induced, 6: 2319(J)
thermal diffusion in gaseous, 6: 2413(J)
Helium ion beams ($He^3$)
acceleration by Cockcroft-Walton accelerator, 6: 1886(J)
energy measurement, calorimeter for, 6: 6291(R)
reactions in C exposed to, 6: 6166(J)
reactions with $He^3$ nucleus, 6: 1535
Helium ions
(See also Alpha particles.)
resonance overcharge in collision with alkali metals, 6: 4526(J)
Helium isotopes
spectra, isotope shifts in, 6: 743(J)
Helium isotopes (liquid)
heat conduction in He II containing $He^3$
Helium isotopes $He^3$
abundance in nature, 6: 1793
charge on atoms of, after $\beta$ decay of T, 6: 5696
constitution diagram of dilute solutions of, in $He^4$ below the lambda point, 6: 2856
deuteron cross sections, 6: 1859
deuteron reactions (d,p), 6: 2182(J), 3407
deuteron scattering cross sections, 6: 3856
formation in reaction $(p + d \rightarrow \pi^o + He_3)$, 6: 4897
helium nucleus capture by, energy spectrum of protons from, 6: 6624(R)
melting pressure, 6: 2108(J)
$\pi^-$-meson absorption by, 6: 3014
nova production by nuclear reactions, 6: 3308(J), 3309(J)
nuclear binding energies, calculated, 6: 4927(J)
nuclear reactions ($He^3$, 2p) $He^4$ and (d,p)$He^4$, 6: 3688
photodisintegration cross sections, calculations, 6: 1868(J)
polarization of, from (d,d) reaction, 6: 5480(J)
properties of liquid and solid, 6: 2418
properties at low temperatures, bibliography, 6: 5795(J)
reaction with $He^3$, 6: 1535
spectra and hyperfine structure, 6: 3257
vapor pressure of solutions in liquid $He^4$, 6: 2387
Helium isotopes $He^3$ (liquid)
determination in $He^3$- $He^4$ mixtures, 6: 5619(J)
entropy and specific heat, calculation, 6: 5623(J)
flow properties at 1.57 and 1.92°K, 6: 2698
magnetic properties, 6: 2677
properties, 6: 3299(R)
second sound in mixtures of $He^4$ and, 6: 5618(J)
Helium isotopes $He^4$
constitution diagram of dilute solutions of $He^3$, below the lambda point, 2856
deuteron cross sections, 6: 1859
deuteron reactions (d,p), 6: 1869(J)
energy levels, 6: 2182(J), 2201(J), 3101(J), 3407, 4198
gamma reactions, selection rules in, 6: 5478(J)
gamma reactions, theory, 6: 4958(J)
neutron elastic scattering by, angular distribution, 6: 5490(J)
neutron scattering by, phase-shift analysis, 6: 4964
nuclear binding energies, calculated, 6: 4927(J)
photodisintegration cross sections, calculations, 6: 1868(J)
properties at low temperatures, bibliography, 6: 5795(J)
proton polarization by scattering from, 6: 1900(J)
proton reactions (p,d), 6: 1821(R), 3407
proton reactions (p,n), 6: 3407
proton reactions (p,p), 6: 3407
proton scattering by, phase-shift analysis, 6: 4964
proton scattering cross sections, 6: 2506
spectra and hyperfine structure, 6: 3257
Helium isotopes $He^4$ (liquid)
properties, 6: 3299(R)
Helium isotopes $He^5$
energy levels, 6: 5490(J)
energy levels, from phase-shift analysis of p-$\alpha$ scattering, 6: 4964
Helium isotopes $He^6$
beta decay, charge of recoil atom in, 6: 4262(J)
energy levels of, from $Li^7$ (t,$\alpha$), 6: 4229(J)
mass difference $He^6$-$Li^6$, 6: 4229(J)
production in the Brookhaven reactor and Columbia cyclotron, 6: 1304(R)
Hematite
adsorption of dodecylamine acetate on, 6: 251(R), 2073(R), 3294(R), 5368(R)
Hematopoietic system
effects of radiation from $Ga^{72}$ on, 6: 527
effects of radiation on, 6: 33
effects of radiation on, in albino rat, 6: 5272(J)
regeneration of bone marrow following irradiation of rats, negative effects of cortisone on, 6: 6279(J)
Hemoglobin
(See also Erythrocytes.)
incorporation of Fe and $\alpha$-C atom of glycine into, rate of, 6: 5295(J)
Hemolysis
caused by irradiation of erythrocytes, 6: 778(J)
Hemorrhage
(See also Blood coagulation.)
effects of radioinduced fibrinolysis on, 6: 4701
enzymatic factors in, 6: 510(R)
induced by x irradiation, 6: 1964
as phase of acute radiation syndrome, 6: 3918(J)
in radiation injuries, nature of 6: 2818(J)
Heparin
(See also the subheading antiheparin activity under specific materials.)
influence on lipoprotein metabolism, 6: 19(J), 497(R)
release in anaphylactic shock in irradiated and non-irradiated animals 6: 5718(J)
Heptane
exchange of D for H in, 6: 122(J)
photochemical chlorination, process for, 6: 3463(P)
reactions with H and $D_2$, 6: 3219
Heptane, hexadecafluoro-
infrared absorption analysis, 6: 3768
thermodynamic and optical properties, infrared and Raman spectra, 6: 1158(J)
vapor pressure, 6: 5329(J)
Heptane – sulfur dioxide systems
diffusion in, 6: 537
Heterocyclic compounds
molecular electric moments, calculation, 6: 1695
Heterogeneous reactors
(See also specific heterogeneous reactors.)
neutron leakage, theory, 6: 4928(J)
thermal neutron diffusion lengths in, theory, 6: 4928(J)
Hexamethylenetetramine
nuclear electric quadrupole resonance of $N^{14}$ in, 6: 3056(J)
Hexane
chemical effects of $\alpha$ particles on, 6: 1421(J)
deuteration and disproportionation, 6: 2615(J)
entropy of vaporization and molecular order in liquid state, 6: 6001(J)
Hexane, 3,3-dimethyl-
reactions with H and $D_2$, 6: 3219
Hexane, 3-methyl-
reactions with H and $D_2$, 6: 3219
Hexane, tetradecafluoro-
entropy of vaporization and molecular order in liquid state, 6: 6001(J)
synthesis, 6: 6002(J)
Hexanethiols
distribution between gas and aqueous solutions, 6: 5368(R)
1-Hexanol
solubility of metallic nitrate hydrates in, 6: 83
1-Hexanol – nickel nitrate systems
phase studies, 6: 81, 2948(J)
Hexatriene, diphenyl-
fluorescence, $\alpha$-or $\gamma$-induced, 6: 653(R)
Hexoses
(See also Sugars.)
ion exchange separation, 6: 148
Hideout No. 1 Mine (Utah)
bayleyite from, mineralogic properties and associated minerals, 6: 5778
High-temperature alloys
(See Heat resisting alloys.)

**Hiroshima**
biological, sociological, and psychological effects of atomic explosion at, ⊙: 5719(J)
environs monitoring following atomic explosion, ⊙: 6490(J)
**Histamine**
effects on distribution of Ca and I, ⊙: 529
effects on intestine from irradiated rats, ⊙: 3171(J)
inactivation of injected, effect of adrenalectomy on, ⊙: 6343
metabolism of injected, and biosynthesis of, ⊙: 5291
oxidation to imidazoleacetic acid in rats, ⊙: 6339
synthesis of $C^{14}$-labeled, ⊙: 4469(J)
**Histidine**
metabolism in normal and cirrhotic liver, ⊙: 4721
metabolism, tracer studies, ⊙: 5291
synthesis of $C^{14}$-labeled, ⊙: 4469(J), 4721
**Holmium**
neutron total cross sections as function of energy, ⊙: 5499(J)
preparation by reduction of chloride or fluoride with Ca in Ta container, ⊙: 3763
**Holmium isotopes $Ho^{165}$**
half life of excited state, ⊙: 2220(J)
internal conversion coefficients, ⊙: 1555, 2223(J)
isomers, upper limit to half life of, ⊙: 1555
**Holmium isotopes $Ho^{166}$**
low-energy $\gamma$ transitions in, ⊙: 2522
radioactive isomer, ⊙: 3618(J)
**Horizons, Inc.**
progress reports, ⊙: 236(R), 1737(R), 4752(R)
progress reports on Zr production, ⊙: 6364(R)
**Hormones**
(See also hormonal factors as subheading under organs, glands, and biological processes; see also specific hormones; see also Estrogens.)
deficiency of, carcinogenetic effects, ⊙: 1080
physiological effects, ⊙: 1080
secreted by $I^{131}$ induced pituitary tumors, physiological effects, ⊙: 1076
**Humidity**
(See also Vapor pressure.)
measurement, ⊙: 3818(R), 5830(R)
**Hyalite (uraniferous)**
occurrence in Argentina, ⊙: 215(J)
**Hyaluronidases**
inhibition by $Ra^{224}$, steroids, and vitamins, ⊙: 3494(J)
**Hydrates**
vaporization, ⊙: 4728
**Hydraulics**
(See also appropriate subheadings under things affected; see also Pumps; Seals and glands; Valves.)
bibliography on tensile strength of liquids, ⊙: 4041
theory of solid-particle conveying, ⊙: 6347(J)
**Hydrazyl, α,α-diphenyl-β-picryl-**
paramagnetic resonance absorption, ⊙: 1166
**Hydriodic acid**
dielectric properties of solid, ⊙: 3980(J)
photochemical reactions, ⊙: 3214
**Hydriodic acid-d**
dielectric properties of solid, ⊙: 3980(J)
photochemical reactions, ⊙: 3214
**Hydroaromatic compounds**
orientation in substitution, quantum mechanical calculations of, ⊙: 4436
**Hydrobromic acid**
bond rupture in, following isomeric transition of $Br^{80}$, ⊙: 3382
dielectric properties in solid state, ⊙: 3243(J)
photochemical reactions, ⊙: 3214
**Hydrobromic acid-d**
dielectric properties in solid state, ⊙: 3243(J)
**Hydrocarbons**
(See also specific compounds; also Fluorohalohydrocarbons; Fluorohydrocarbons.)
chemical effects of α particles on, ⊙: 1421(J)
fluorination with $BiF_5$, ⊙: 1570(P)
hydrogen exchange and isomerization of saturated, with $D_2SO_4$, ⊙: 5059(J)
mass spectrography of ionic fragments, ⊙: 4136(J)
molecular fission by electron impact, ⊙: 836(J)
molecular ion formation in mass spectrography, ⊙: 4137(J)
molecular structure relation to nuclear relaxation time, ⊙: 1418(J)
negative free radicals of, formation, ⊙: 6528
perfluorination by passing over $CeF_4$ at 100° to 450°C, ⊙: 6210(P)
photochemical chlorination, process for, ⊙: 3463(P)
properties of some small-ring, molecular orbital calculations of ⊙: 4435
radiation chemistry, ⊙: 3249
reflection of slow neutrons from liquid, ⊙: 1903(J)
**Hydrocarbons (cont'd)**
spectra of flames of, with fluorine, ⊙: 2032(J)
steady-state transients in nuclear resonance and nuclear relaxation time, ⊙: 5459(R)
thermal decomposition, to form graphitic coke, ⊙: 6006
viscosity, temperature dependence of, ⊙: 6031(J)
**Hydrochloric acid**
dielectric properties of solid, ⊙: 3980(J)
ionization in dioxane-water solutions, ⊙: 1631
isotopic exchange with $AlCl_3$, ⊙: 4031
**Hydrochloric acid-d**
dielectric properties of solid, ⊙: 3989(J)
**Hydrochloric acid–isopropyl ether–water systems**
phase studies, ⊙: 3766
**Hydrocyanic acid**
chemical determination, ⊙: 6526(R)
gravimetric determination with $AgNO_3$, ⊙: 3211(R), 3212(R)
l-type doubling transitions in HCN and DCN, ⊙: 5352(J)
microwave spectrum and molecular constants of $HC^{13}N$, $HC^{15}N$, and $DC^{13}N$, ⊙: 4673(J)
**Hydrocyanic acid (labeled)**
Raman spectra, ⊙: 4280
**Hydrofluoric acid**
exchange reactions with interhalogen compounds, ⊙: 125
heat of fusion and vaporization, thermal capacity, ⊙: 6554
infrared absorption spectra of gaseous, ⊙: 5332(J)
physical properties, ⊙: 2879
polarographic behavior, ⊙: 3520
preparation from alkaline earth fluorides, ⊙: 6557
solvent properties, ⊙: 2879
thermodynamic properties of atomic and molecular, ⊙: 3987(J)
**Hydrofluoric acid systems**
redox reactions in, polarographic study of, ⊙: 552(R)
**Hydrogen**
absorption of cosmic particles in, ⊙: 260(J)
adsorption by dispersed Rh and Rh–Pd alloy in aqueous KOH, $H_2SO_4$, and HBr, ⊙: 6337(J)
catalytic oxidation for Los Alamos Water Boiler, ⊙: 2178
collision probability for slow electrons in, ⊙: 1490
compressibility isotherms and thermodynamic functions of mixtures of, with $N_2$ and $NH_3$, ⊙: 1275(J)
cosmic-ray penetrating showers in, multiplicities of, ⊙: 6085(J)
cross section for production of penetrating showers by non-ionizing radiation, ⊙: 5131(J)
determination, bibliography on, ⊙: 110
deuteron cross sections, ⊙: 1859
deuteron scattering by, ⊙: 1330(J)
deuteron scattering cross sections, ⊙: 717
diffusion and self-diffusion coefficients, ⊙: 4117(J)
diffusion coefficients in, ⊙: 4565(J)
drying by passing through NaK trap, ⊙: 5335
effects on mechanical and physical properties of Ti, ⊙: 4789
effects on stability of fluorocarbons, ⊙: 1662
electron-excitation cross section, distorted wave treatment of, ⊙: 4651(J)
electron scattering by, Oppenheimer approximation, ⊙: 4972(J)
energy spectra of protons scattered from, ⊙: 388, 1753
exchange between $NH_3$ and $D_2$, equilibrium in, ⊙: 3241
excitation potentials and range of α particles in, ⊙: 4238(J)
fine structure, mass corrections to, ⊙: 5526(J)
fluorescence, excited by α particles, ⊙: 2521(J)
formation in 2s state, by slow protons in He, ⊙: 5616(J)
formation of $H_3O^+$ by, in water, ⊙: 2131(J)
gamma reactions $(\gamma,\pi^+)$, ⊙: 6620(R)
gamma reactions $(\gamma,\pi^-)$, cross section calculations, ⊙: 6134
gasometric determination in Mg, Li, and Mg-Li alloys, ⊙: 2604
hyperfine structure, mass corrections to, ⊙: 5186(J)
infrared absorption in, pressure-induced, ⊙: 2318(J)
infrared spectra, calculations, ⊙: 161(J)
ionic reactions in, mass-spectrographic study, ⊙: 2423(J)
isotopic exchange reactions between phosphine and $H_2O$, ⊙: 3516
isotopic exchange reactions with Li and Na borohydrides, ⊙: 1176
liquefaction and storage of partially converted, ⊙: 3610
mass, ⊙: 349(J), 991(J)
mass, by mass spectrography, ⊙: 1793
mass, from nuclear reaction energies, ⊙: 992(J)
mass defect, theory, ⊙: 1060(J)
mass spectrographic determination, ⊙: 2352
meson multiple production in, by cosmic particles, ⊙: 267(J)
meson scattering cross sections, ⊙: 2448, 2721, 3020(J)
meson total cross sections, ⊙: 2724(J), 3019(J), 3021(J)
mesons from, by photon reactions, ⊙: 3033(J), 3649(J)
mesons from proton reactions in, angular distribution, ⊙: 4595

Hydrogen (cont'd)
π-meson capture and charge-exchange scattering by, correlation of, 6: 4607(J)
π-meson capture by, 6: 4178(J)
π-meson interaction cross sections, at very high energies, 6: 5405
π-meson scattering by, 6: 315
π-meson scattering by, phenomenological theory of, 6: 3371(J)
π-meson scattering cross sections of, 6: 1818
π-meson scattering cross sections, theory, 6: 4164(J)
π mesons from, by photon reactions, 6: 324
$\pi^-$-meson scattering cross sections, 6: 316
$\pi^-$-meson total cross sections, 6: 3648
$\pi^0$ meson production from, by 340- Mev proton beam, 6: 5847
$\pi^0$ mesons from, by photon reactions, 6: 317, 671
$\pi^+$-meson scattering by, angular distribution, 6: 4591
$\pi^+$-meson scattering by, angular distribution and phase-shift analysis of, 6: 4606(J)
$\pi^+$-meson total cross sections, 6: 4895
$\pi^+$ mesons from, by proton reactions, 6: 669, 670, 2450, 4592, 4926
molecular, effect of pressure on solubility in β phase of Pd–H systems 6: 6336(J)
molecular, nuclear r-f spectra in high and low magnetic fields, 6: 5465(J)
molecular spectra, 6: 3127
molecular vibration of, and of its deuterated forms, 6: 137(J)
narrow-angle pair of particles produced in, by cosmic radiation, 6: 5626(J)
neutron and proton scattering cross sections, 6: 1887
neutron coherent scattering amplitude, 6: 1860, 1903(J)
neutron reactions (n,p), 6: 716
neutron scattering by, 6: 381, 715
neutron scattering by, angular distribution, 6: 4975(J)
neutron scattering by, azimuthal polarization in, 6: 2498
neutron scattering cross sections, 6: 729(J), 1340, 2505
neutron scattering cross sections, theory, 6: 5493(J)
neutron total cross sections, 6: 1525, 5486(R)
neutron total cross sections for, measurement, 6: 2467
nuclear magnetic resonance of, absorbed into Pd wires, 6: 4624(J)
nuclear magnetic resonance of, spin-spin interaction in, 6: 6439
nuclear momentum distribution in, inferred from proton scattering, 6: 1841
ortho-para, thermal conductivity analyzer for, 6: 3329
ortho-para conversion, catalyst for, 6: 6394
ortho-para conversion, kinetics analysis of flow catalysis of, 6: 3213
para-conversion on W, 6: 3658(J), 3659(J)
permeation into metals, mechanism of, 6: 3786
polarizability of molecular, 6: 3242
primary specific ionization in, at high energy, 6: 4832(J)
proton elastic scattering cross sections, 6: 5212
proton range-energy relation in, 6: 2199
proton range-energy relation in, effect of $H_2$ pressure on, 6: 1339
proton reactions (p,π), charge ratio of mesons produced, 6: 6626
proton reactions in nuclear emulsions, 6: 611(J)
proton scattering by, 6: 2710, 5486(R)
proton scattering by, mass changes in, 6: 3858
proton scattering by, meson potentials and mass in low-energy, 6: 5653(J)
proton scattering near 18 Mev, 6: 6694
ranges of fission products in, 6: 2504
reaction kinetics of, with U metal, 6: 573
reactions with methyl radicals, 6: 3529(J)
reactions with NaO, 6: 5569
reactions with U, 6: 3347(J)
reduction of NiO by, 6: 2305(J)
spectra of flames of, with fluorine, 6: 2032(J)
spectrophotometric determination in body water, 6: 5830(R)
theory of molecular, in magnetic fields, 6: 1826(J)
thermal conductivity at low pressure, 6: 6591(J)
thermodynamic equilibrium with Mo, Mo carbides, and $CH_4$, 6: 6615(J)
thermodynamic properties at zero pressure, 6: 3803
thermo-osmosis through rubber, 6: 1776(J)
vacuum fusion determination in Mo, Th, Ti, U, V, and Zr, 6: 3254(J)
yield on x irradiation of aqueous solutions, 6: 2329
Hydrogen (liquid)
heat exchange with Cu surface, 6: 5593
two-phase flow of, in horizontal tubes, 6: 5767
Hydrogen bromides
(See Hydrobromic acid.)
Hydrogen cyanide
(See Hydrocyanic acid.)
Hydrogen deuteride
(See Deuterium hydrides.)
Hydrogen – deuterium systems
isotope separation in transition region between Knudsen and Poiseuille flows, 6: 5638(J)
Hydrogen–deuterium systems (cont'd)
mass spectrographic analysis, 6: 547
thermal diffusion in gaseous, 6: 2413(J)
Hydrogen fluorides
(See Hydrofluoric acid.)
Hydrogen halides
(See also specific compounds; e.g., Hydriodic acid.)
thermodynamic functions, 6: 274
Hydrogen – helium systems
infrared absorption in, pressure-induced, 6: 2319(J)
thermal diffusion in gaseous, 6: 2413(J)
Hydrogen iodides
(See Hydriodic acid.)
Hydrogen ion concentration
colorimetric determination, 6: 4748(R)
conductometric titration determination in solutions containing hydrolyzable ions, 6: 5312
estimation in solution of $Th(NO_3)_4$, 6: 3522
Hydrogen ions
(See also Protons.)
dissociation of molecular, by collision of air and argon in cyclotron, 6: 4639(J)
elastic scattering and neutralization of, in ethane and propane, 6: 6469
mobility in $H_2O$, 6: 5058(J)
perturbation energy, calculation of, 6: 5175
response of scintillation crystals, 6: 966(J)
Hydrogen isotopes
distillation, Stedman packing in, 6: 2988(J)
effects on bonds in crystals, 6: 550(J)
effects on isomer distribution in nitration of halobenzenes, 6: 5298(R)
exchange reactions, 6: 3981(J)
mass spectrographic analysis, hydrogenous sample preparation, 6: 6114(J)
mass spectrographic determination using U reduction, 6: 1792
water exchange and barriers as studied by use of, 6: 1981
Hydrogen isotopes $H^1$
(See Hydrogen.)
Hydrogen isotopes $H^2$
(See Deuterium.)
Hydrogen isotopes $H^3$
(See Tritium.)
Hydrogen molecules
reversible dissociation, 6: 3659(J)
Hydrogen – oxygen mixtures
combustion effects of ionizing radiation on, 6: 2356(R)
Hydrogen – oxygen – potassium systems
phase studies, 6: 5569
Hydrogen – oxygen – sodium systems
phase studies, 6: 5569
Hydrogen – oxygen – steam systems
explosive limits, 6: 273
Hydrogen – palladium systems
effect of pressure on solubility of molecular $H_2$ in β phase of, 6: 6336(J)
magnetic properties, 6: 5304(J)
Hydrogen peroxide complexes
with titanium in acid solution, 6: 3226(J)
Hydrogen peroxide – water systems
ionic product of, determination, 6: 1991
specific conductivity, 6: 1991
Hydrogen peroxides
corrosive effects and chemical stability, 6: 240(J)
decomposition by γ radiation, 6: 3250
decomposition by γ radiation, mechanism and rate constants of, 6: 1677
decomposition by x radiation, 6: 2332(J)
effects of intraperitoneal injections of, on nucleoprotein fraction of rat intestine and on whole rat intestine, 6: 2558
effects on biological systems, bibliography on, 6: 3738
formation and decomposition in Po-irradiated $H_2O$, 6: 6569(J)
formation by action of α particles on $H_2O$ and solutions of carboxypeptidases, 6: 6328(J)
formation by irradiation of $H_2O$, 6: 3738
formation by pile-irradiation of aqueous B solutions, 6: 5067(J)
formation during γ radiation decomposition of $H_2O$, 6: 4006(J)
formation in pile-irradiated aqueous solution, effects of electrolytes on, 6: 5066(J)
isotopic composition of O in catalytic decomposition of, 6: 4729(J)
oxygen isotope fractionation in reactions of, 6: 4473(J)
physiological effects, 6: 3738
physiological effects on biological processes and substances, 6: 2566
in radiation syndrome, 6: 5550(R)
radiolysis, 6: 2631(J)
radiosensitivity effects, 6: 2566
radiosensitivity effects on paramecium, 6: 3892, 6248(J)

Hydrogen selenides
mass spectrometric ionization, dissociation, and critical potential, 6: 5145(J)
Hydrogen sulfides
mass spectrometric ionization, dissociation, and critical potential, 6: 5145(J)
Hydrogen sulfides-d
microwave spectrum and molecular properties, 6: 1521
Hydrogen – titanium systems
(See also Titanium hydrides.)
microstructure, 6: 4790
phase studies, 6: 4789, 4790
Hydrogen tritides
mass spectrographic determination, 6: 2352
molecular spectra, 6: 3127
spectra, 6: 2895(R), 3042
Hydrogen – tritium systems
molecular components of, equilibrium concentrations, 6: 2352
Hydrogenation
(See also as subheading under specific materials.)
rate equations for catalytic, 6: 1637
Hydrolysis
(See also as subheading under specific materials.)
heat of reaction and crystal energy in high-temperature, of solid trichlorides, 6: 1753
of organic phosphates, catalytic effects of molybdate on, 6: 5987
Hydrosols
(See Colloids.)
Hydroxides
bibliography, 6: 4397
Hydroxyacetic acid
(See Glycolic acid.)
Hydroxyl radical
exchange reaction with $H_2O$, 6: 5046(J)
thermodynamic properties of neutral, from near 0 to 6000°K, 6: 3302
Hydroxylamine
toxicity for catalase enzyme systems and for intact animals, and effects on radiosensitivity of tumors and of intact animals, 6: 6262(J)
Hydroxylamine hydrochloride
synthesis of $N^{15}$-labeled, 6: 6579(R)
Hydroxylamines, alkyl-
reaction with nitrous acid, 6: 1628
Hyperfine structure
(See also appropriate subheadings under specific materials.)
analysis of incompletely resolved lines, 6: 6451(J)
double resonance method for investigation of, 6: 3876(J)
magnetic effect of atomic core on, 6: 3835(J), 4619
mass corrections to, of H and D, 6: 5186(J)
modifications in, produced by electrodynamic effects, 6: 690(J)
nuclear magnetic moment measured by, anomaly in, 6: 1839
of $p_{\frac{1}{2}}$ states, and nuclear moment factor, 6: 4627(J)
radiative corrections to, theory, 6: 451(J)
second-order radiative corrections to, 6: 4994(J)
of solutions containing $Mn^{++}$ ions, 6: 1312(J)
theoretical explanations of anomalies in, and measurements on $Tl^{203}$ and $Tl^{205}$, 6: 4929(J)
theory, 6: 3140(J)
Hypophosphorous acids
exchange reactions with HTO, 6: 2904(J)
Hypophysis
(See Pituitary gland.)
Hypoxia
(See Anoxia.)
Hypsometers
carbon dioxide, design, 6: 3338(R), 3818(R)

I

Ice
luminescence of, following x irradiation, 6: 5581
self-induced luminescence in tritated, 6: 5581
Igneous deposits (Colo.)
of uranium and Th, in radioactive tertiary porphyries in Central City district, 6: 6356
Illinois Inst. of Tech.
progress reports, 6: 552(R)
Illinois Univ.
progress reports, 6: 2214(R), 3211(R), 3212(R), 4004(R), 4978(R), 2526(R)
Illite
analysis, 6: 1458
Imidazoleacetic acid
biosynthesis as an intermediate in histamine metabolism in rats, 6: 6339
Imidazoline, 2-heptadecyl-
synthesis of $C^{14}$-labeled, 6: 4759
Immunity
effects of γ radiation on, to virus, bacteria, toxins, and parasites in mice, 6: 6246(J)
effects of radiation on suppression of tuberculin reaction in rabbits, 6: 6261(J)
Immunization
effects of x radiation on, to C. septicum toxin in mice, 6: 6240
Impact shock
measurement, 6: 2073(R)
Impact tests
(See also as subheading under specific materials.)
equipment for, 6: 4497(R)
Incompressible flow
stability of plane Poiseuille, 6: 4487(J)
Inconel
(See Nickel alloys.)
Index of refraction
(See as subheading under specific materials.)
Indian corn
(See Maize.)
Indium
determination, 6: 4724(R)
diffusion of In and Tl in, near the melting point, 6: 895
heat of combustion, 6: 1998(J)
neutron low-energy resonances in, 6: 5427
neutron total cross sections as function of wavelength, 6: 3674
nuclear moment factor in $p_{\frac{1}{2}}$ state, 6: 4627(J)
polarographic reduction in nitrate and perchlorate media, 6: 5311(R)
radioactivation determination, 6: 6306(J)
reduction, polarographic study, 6: 2585
resistance hysteresis in superconductive transition, 6: 2944
x-ray spectra, 6: 97(J)
Indium complexes
equilibrium constants, 6: 535
Indium – indium sulfide systems
phase studies, 6: 2601(J)
Indium isotopes
decay schemes, 6: 3056(J)
isomeric transition, 6: 409
production by α, d, or n bombardment of Cd isotopes, 6: 3056(J)
Szilard-Chalmers concentration, 6: 4017(J)
Indium isotopes $In^{111}$
decay schemes, 6: 1352(J), 5463(J)
gamma emission, effect of chemical state on angular correlations, 6: 5456(R)
internal-conversion coefficients, 6: 2146(J)
Indium isotopes $In^{113}$
neutron transmission, 6: 6624(R)
quadrupole moment calculated from hfs, 6: 3680(J)
slow neutron resonances in, 6: 4620
Indium isotopes $In^{114}$
beta emission and conversion electrons from, 6: 3713(J)
decay schemes, 6: 650(R)
internal conversion in, 6: 1919(J)
Indium isotopes $In^{115}$
chemical separation of isomeric, 6: 845(J)
neutron transmission, 6: 6624(R)
nuclear isomer from excitation by positron-K electron annihilation, 6: 2490(J)
proton reactions (p,n), threshold determinations, 6: 5474(R)
quadrupole moment calculated from hfs, 6: 3680(J)
slow neutron resonances in, 6: 4620
Indium isotopes $In^{117}$
radiometric determination, 6: 6531(R)
Indium oxides
heat of formation, 6: 1998(J)
Indium single crystals
magnetic susceptibility, 6: 2938(J)
Indium sulfide – indium systems
phase studies, 6: 2601(J)
Indium sulfides
oxidation in air, 6: 2001(J)
Indium – thallium alloys
magnetic properties of superconducting, 6: 2947, 5792(J)
phase studies, 6: 1238(R), 3787(R)
phase transformation, effect of stress on, 6: 5781(R)
resistance hysteresis in superconductive transition of, 6: 2944
Indole, 2-methyl-
fluorination with $CoF_3$, 6: 2031(J)
Indole, 3-(2 amino-ethyl)-5-hydroxy-
protective action against lethal doses of x radiation, 6: 5948

Indoleacetic acid
purification, 6: 4692(R)
synthesis of labeled, 6: 164, 568
Induction furnaces
for brazing Ti and Ti-alloys, 6: 5383(R)
for melting reactive metals, design, 6: 2080
Induction heating
(See also Furnaces.)
in measurement of high temperature properties, theory, 6: 3559
Infections
(See also specific bacteria, diseases, organs, etc.)
effects of radiation on resistance to, 6: 5541(R)
effects of total-body x irradiation on susceptibility of mice to influenza virus, 6: 2811(J)
in radiation syndrome, factors affecting, 6: 4698(R)
Infrared gas analyzers
design for measuring concentrations of fluorocarbons in air, 6: 3614
Infrared radiation
(See also Thermal radiation.)
detection and measurement using temperature sensitive phosphors, 6: 1510
effects on x- and $\gamma$-ray induced chromosomal aberrations, 6: 27
Infrared spectrometers
preparation of metal sulfide film filters for, 6: 5239
Insecticides
(See also specific insecticides.)
lethal effects of systemic, in orange and lemon plants on citrus mites and thrips, 6: 5965
synthesis of $P^{32}$-labeled Parathion, 6: 6016(J)
testing of systemic, tracer studies, 6: 5558
Insects
(See also specific insects.)
labeling of screw-worm fly with $P^{32}$, techniques for, 6: 5296(J)
tracer applications in study of, 6: 4723
Institute of Engineering Research, Univ. of Calif., Berkeley
progress reports, 6: 201(R), 231(R), 2066(R), 4056(R), 5106(R)
Institute of Science and Tech., Univ. of Ark.
progress reports, 6: 3248(R)
progress reports on recrystallization of $Al_2O_3$, 6: 6601(R)
Institute for the Study of Rate Processes, Univ. of Utah
progress reports, 6: 2886(R)
Instruments
(Common instruments are entered directly, e.g., Pressure gages and Voltmeters. See also various processes for pertinent instrumentation; see also Electronic equipment; Radiation detection instruments.)
development at the National Bureau of Standards, 6: 1497(R)
Insulators
(See Electric insulators; Thermal insulation.)
Insulin
effects on $P^{32}$ uptake by erythrocytes, 6: 790
effects on protein metabolism, 6: 2289
therapeutic uses in hyperglycemia, 6: 4697(R)
Intercoolers
for high-altitude cooling, 6: 1711
Interferometers
(See also Optical systems; Spectrometers.)
design, 6: 5830(R)
electron, design, 6: 2982(J)
wide beam, design, 6: 3338(R)
Internal combustion engines
(See also Aircraft engines.)
effects of ionizing radiation on, 6: 2356(R)
Internal conversion
(See also Conversion electrons; see also appropriate subheadings under Gamma radiation and under specific isotopes.)
accompanying $\alpha$ emission, 6: 4248
angular correlations for transitions of mixed multipolarity, 6: 5231
in barium $Ba^{137}$, $Cd^{110}$, $In^{114}$, and $Pr^{144}$, 6: 1919(J)
calculation of final state of nuclei from coefficient of, 6: 1064(J)
coefficients for $\gamma$ radiation from $Bi^{214}$, 6: 4278(J)
coefficients for K-shell, in $Dy^{160}$, $Ho^{165}$, $Er^{166}$, and $Yb^{170}$, 6: 2223(J)
coefficients for L-shell, 6: 3118(J)
in gold ($Au^{197}$) due to interaction of L sub-shells, 6: 6079
of magnetic dipole radiation of $L_I$ shell, 6: 6484(J)
measurement, 6: 2146(J)
measurement by scintillation pulse analysis, 6: 1499
in technetium ($Tc^{99}$), effect of chemical combination on, 6: 733, 734
theory, 6: 409
Intestine
effects of acetylcholine and histamine on, from irradiated rats, 6: 3171(J)
effects of $K^{42}$ on contraction of, 6: 3163(J)
effects of radiation and injected $H_2O_2$ on, in rats, 6: 2558
effects of radiation on, 6: 37
Intestine (cont'd)
effects of radiation on function and mucosa of, 6: 5545
effects of shielding of, on lethal effects of x-rays, 6: 1083
effects of x radiation on, 6: 1957(J), 3173(J)
systemic effects of irradiation of, 6: 35
Inulin space
determination and comparison with bromide, chloride, and Na space in dogs, tracer study, 6: 5970
Invar
(See Iron – nickel alloys.)
Invertase
action on sucrose, 6: 1704(J), 5966
Invertebrates
effects of radiation on, 6: 1381(J)
Iodates
solubility, influence of mixed solvents on, 6: 100(J)
Iodine
atomic weight, 6: 3972(J)
diagnostic and therapeutic uses, 6: 523(J)
effects in radiolysis of hydrocarbons, 6: 1674
metabolism abnormalities in patients suffering from heart diseases, 6: 2849(J)
metabolism by thyroid, effects of corticotropin and cortisone on, 6: 3950(J)
neutron capture cross sections, 6: 4880(J)
proton reactions at high energies, 6: 5875(R)
reactions with esters of phosphorous acid, 6: 5561
reactions with methane induced by neutron capture, 6: 6566(J)
removal from $H_2O$, ion exchange resins for, 6: 6512(R)
separation of protein bound iodine from iodide of blood plasma, 6: 4697(R)
spectra, effects of oxygenated solvents on, 6: 1694
spectra of solutions in highly acidic, polar solvents, 6: 6338
stannometric determination, 6: 3234(J)
thermodynamic properties at zero pressure, 6: 3803
tissue distribution during histamine shock, 6: 529
tissue distribution in chick embryo, as related to development, 6: 2283
tissue distribution, in larvae, 6: 111
tissue distribution in thyroid, pituitary, adrenals, and blood, effects of desoxycorticosterone acetate and hemithyroidectomy on, 6: 2276(J)
uptake by thyroid gland, 6: 496(R)
Iodine chlorides
spectra of solutions in highly acidic, polar solvents, 6: 6338
Iodine compounds
Szilard-Chalmers reaction with, 6: 4002
Iodine ions
collision of negative with atoms, 6: 3705(J)
Iodine ions (recoil)
positively charged, 6: 3761
Iodine isotopes $I^{124}$
forbidden $\beta^+$ spectra, 6: 1914(J)
Iodine isotopes $I^{126}$
decay $\beta$-$\gamma$ angular correlations in, 6: 1843(J)
Iodine isotopes $I^{127}$
quadrupole resonance frequency, in crystalline covalent compounds, 6: 343(J)
Iodine isotopes $I^{129}$
gamma emission, 6: 5657(R)
nuclear properties, 6: 1928
Iodine isotopes $I^{131}$
beta and $\gamma$ spectra, 6: 422(J)
in blood serum after large doses, nature of, 6: 5944(J)
capsules for oral administration of, 6: 5031(J)
chemical behavior in trace concentrations, 6: 3248(R)
concentration in hospital wastes, 6: 519(J)
contamination of metal surfaces by, in solution, 6: 883
decay schemes, 6: 436(J), 1371, 1922(J), 2777, 3723(J)
in diagnosis and treatment of thyroid cancer, 6: 3190(J), 5961(J)
in diagnosis and treatment of thyroid disease, 6: 3925(J)
diagnostic and therapeutic uses, 6: 3742(J)
disintegration, 6: 420(J)
disintegration, average $\beta$ energy per, 6: 3439(J)
dosage determination based on uptake and turnover following tracer dose, 6: 1976(J)
dosage determination in thyroid glands, 6: 67(J)
effect on thyroid gland, 6: 2257(J)
fatal obstructive endo- and peritracheitis induced by, during therapy, 6: 2834(J)
gamma emission, 6: 1511
histological and pathological effects on thyroid gland, 6: 1604(J)
internal conversion, 6: 2777, 3712
internal conversion coefficient and branching ratio of 80-Mev $\gamma$ ray from, 6: 4630(J)
internal radiotherapy, review, 6: 3930(J)

Iodine isotopes $I^{131}$ (cont'd)
in localization of tumors of the brain, 6: 2844(J)
metabolism, in patients with hyperthyroidism, 6: 3929(J)
occurrence of acne and gynecomastia after administration in hyperthyroid therapy, 6: 1087(J)
physiological effects and tissue distribution of therapeutic doses, 6: 1104(J)
pituitary tumors produced by, 6: 776(J), 1080, 3498(J)
plasma index by, for assessing thyroid activity, 6: 3946(J)
production from pile-irradiated Te, 6: 151
removal from water supplies, 6: 515
therapeutic uses during pregnancy, 6: 2830(J)
thyroid fixation, apparatus for measurement, 6: 3644(J)
thyroid neoplasms induced by, 6: 4357(R)
thyroid uptake and turnover of therapeutic doses, 6: 2278(J)
thyroidal plasma clearance routine determination, 6: 2845(J)
tissue distribution and pathological effects in sheep, 6: 5276(J)
toxicology, 6: 5716(R)
toxicology, in rats, 6: 3939(J)
tracer techniques in thyroid metabolism studies, 6: 5972(J)
in treatment of hyperthyroidism, 6: 3509(J), 4712
in treatment of hyperthyroidism, effects of drugs on results obtained, 6: 6286(J)
in treatment of hyperthyroidism, review of clinical results, 6: 3932
in treatment of thyroid carcinoma, 6: 68(J), 3933(J)
in treatment of thyroid neoplasm, evaluation of, 6: 5288(J)
urinary excretion curves for humans, determination of, 6: 5977(J)
Iodonium, diphenyl- ions
formation, mechanism of, 6: 4032(J)
Ion beams
(See also headings for beams identified by particles, e.g., Neutron beams; Molecular beams; etc.; see also Accelerators; Beryllium ion beams; Carbon ion beams.)
aberration in electrostatic field, theory, 6: 3700(J)
detection of heavy, with electrostatic electron multipliers, 6: 5833(R)
dissociation of ions by molecular collision in, 6: 4136(J)
double focusing with small magnetic lenses, 6: 1794
electron release by, mass dependence of, 6: 2421(J)
focusing, 6: 296(R), 476(P)
focusing with wedge-shaped non-uniform magnetic field, 6: 4637
formation from hydrocarbons, 6: 4137(J)
heavy, possibilities and distortion effects in bombardment with, 6: 5207(J)
intensity measurement integrating circuit for, 6: 5204(J)
measurement, coincidence counting method applied to, 6: 3626
measurement of gas density with, 6: 2507(J)
neutralization of space charge in positive, 6: 636(J)
range-energy relations for $H^+$, $He^+$, $N^+$, $Ne^+$, $N_2^+$, and $A^+$, 6: 5399(R)
space charge and virtual cathode in, 6: 3415(J)
from Van de Graaff accelerators, energy control, 6: 3692
Ion exchange
(Theoretical reports on equilibria, etc.; see also as subheading under specific materials; see also Adsorption.)
application to large scale separations of $N^{15}$-labeled amino acids, 6: 2050(J)
chromatographic application to amino acids, nucleotides, sugars, and related substances, 6: 1989
rare-earth separation by, theory, 6: 1690(J)
theory of equilibria between an exchanger and an aqueous solution with a common cation, 6: 3541
Ion exchange materials
(See also specific materials, e.g., Resins; Zeolites; see also Anion exchanging compounds; Cation exchanging materials.)
electrolytic conductance and self-diffusion of Na ions in, correlation between, 6: 2586
performance, 6: 4724(R)
suitability for electrophoretic separations, 6: 1424(R)
Ion exchange processes
electromigration in membranes, 6: 5298(R)
theory of countercurrent, 6: 4440(R)
Ion exchangers
automatic sample separator for use with, 6: 2326(J)
continuous countercurrent, design and performance, 6: 4440(R)
for rare earth separation, design, 6: 3545(J)
with rotating-membrane belt design, 6: 6531(R)
for waste processing low activity solutions, design, 6: 4764(R)
Ion gages
(See Ion sources; Vacuum gages.)
Ion pair production
by alpha particles in He, He+A, Ne, Ne+A, 6: 5639(R)
average energy for, in A and Kr, 6: 2974(R)
in radioinduced oxidation of ferrous sulfate, 6: 5344
in radioinduced reduction of ceric sulfate, 6: 5344
Ion pumps
high-vacuum high-speed, design and performance of, 6: 6593
Ion sources
(Covering ions from nonradioactive sources; for radioactive sources see headings identified by emitted radiation, e.g., Alpha sources; see also instruments having an ion source component, e.g., Accelerators; Mass spectrometers.)
design, 6: 1549
emission regulator for mass spectrometer, 6: 3620
flat-beam electron, focusing, 6: 4566(J)
high-intensity pulsed, for 4-Mev Berkeley electrostatic generator 6: 3694
for hydrogen ($H^3$) and $He^3$ ions, 6: 1886(J)
mass spectrometer, for solid materials, 6: 5828
for mass spectrometer, 6: 972(J), 1574(P), 1580(P)
multiple filament surface type, design, 6: 6402
for negative ions, 6: 290(J)
operation, 6: 481(P)
preparation of, instrument for, 6: 4335(P)
for Utrecht 800-kv cascade generator, design, 6: 5684(J)
for Van de Graaff generator, testing, 6: 3387(R)
yielding 20-kev H-ion beam, design, 6: 5206(J)
Ionization
(See also as subheading under materials; see also Gaseous ionization.)
efficiency curves, measurement by mass spectrometers, 6: 3363(J)
loss of charged particles, density effect for, 6: 5503
polarization effects in energy loss of charged particle by, 6: 6699(J)
relative, by low-energy protons, deuterons, $\alpha$ particles in gases, 6: 3707(J)
by relativistic charged particles, energy loss in, 6: 5216(J)
Ionization chambers
(See also Cloud-ion chambers.)
boron trifluoride for, 6: 639
calibration, 6: 662(J)
calibration of 4 $\pi$ high pressure, 6: 643
calibration of standard, low-geometry $\alpha$, 6: 4145(R)
calibration study of modified 1-$\pi$ Argonne-type, 6: 4578
for carbon ($C^{14}$) measurement, 6: 654
for $C^{14}O_2$ measurement, review of, 6: 2439(J)
cavity type, calibration and performance, 6: 3631
charging, instrument for, 6: 3635(J)
circuit for regulating gas ionization at different pressures, 6: 6229(P)
for comparing nuclear reactions, 6: 1576(P)
condenser type, for measuring $\gamma$ radiation in fast-neutron field, 6: 5833(R)
continuous-flow type, design and operation, 6: 4983(R)
for continuous x-ray monitoring, 6: 958
cosmic-ray intensity measurement with, 6: 928(J)
design, 6: 296(R), 640(R), 956, 4321(P)
design and performance, 6: 3339(R), 3354(R)
design, calibration, and performance at RCA, 6: 638(R), 650(R), 651(R), 652(R)
for detecting $\alpha$ particles on filter papers, design, 6: 4329(P)
distortion of transients in cylindrical, 6: 3355
effect of dimensions upon ionization in, 6: 2155(J)
electrical depth, determination of, 6: 300(J)
electron migration velocity in A and A-N mixtures, 6: 4885(J)
gamma-ray slit-type, 6: 3640(J)
hermetically sealed pocket type, 6: 6235(P)
impedance, 6: 3001
for indicating fission and determining fission cross sections, design, 6: 4320(P)
ionization in A-$CO_2$-filled, by $B^{10}(n,\alpha)Li^7$, 6: 4944
for measuring air absorption of high-energy particles, design, 6: 6620(R)
for measuring $\gamma$ radiation, 6: 6662
for measuring neutron flux, 6: 6230(P)
for monitoring radioactivity of gas stream, 6: 4333(P)
neutron-detecting, technique of filling with $BF_3$, 6: 5151(J)
pressure response, 6: 3642(J)
for radiotherapy, 6: 668(J)
reabsorption of Compton-scattered radiation in, 6: 4977(J)
reaction-energy measurements with, 6: 2193(J)
response to $\gamma$ radiation, effects of filling gas, pressure, and wall materials on, 6: 5831(R)
response to $\gamma$ rays and neutrons, 6: 3182(R)
saturation effects in, at different dose rates, instrument for measurement of, 6: 6512(R)
saturation properties, 6: 6408
single-operation $\alpha$, for plated samples, 6: 4145(R)
small cylindrical differential, 6: 5639(R)
for soft-x-ray dosimetry, combination extrapolation- and mesh-type, 6: 4879(J)

Ionization chambers (cont'd)
for soft-x-ray dosimetry, design of free-air, 6: 4878(J)
theory and application of, 6: 2140
for thermal neutron detection, design and performance, 6: 5716(R)
for thermal neutron flux measurement, 6: 666(J)
thick-walled, for measuring intensity of x radiation up to 25 Mev, 6: 3643(J)
voltage loss, measurement by electrometer, 6: 3635(J)
windows for, rubber hydrochloride films as, 6: 5827
Ionization potentials
determination, monoenergetic electron source for, 6: 1263(J)
determination by mass spectrography, 6: 291(J)
Ions
(See also heading for ions by name, e.g., Uranium(IV) ions; see also Anions; Electrolytic ions; Gaseous ions; Recoil ions.)
acceleration, 6: 481(P)
charge neutralization between positive and negative, 6: 3533
lateral distribution across the track of an ionizing particle in liquid, 6: 2412(J)
paths in crossed electric and magnetic fields, 6: 3697(J)
polarizability in eutectic mixtures, 6: 119
Ions (complex)
association constants of, analysis of general mathematical formulations for, 6: 4572
Iowa State Univ.
progress reports, 6: 3412(R)
Iridium
atomic weight, 6: 3972(J)
neutron low-energy resonances in, 6: 5427
spectra, hyperfine structure, 6: 6158(J)
tissue distribution in rats, 6: 496(R)
Iridium isotopes
identification of $Ir^{195}$, $Ir^{196}$, and $Ir^{197}$, 6: 4660
separation, 6: 3156
Szilard-Chalmers concentration, 6: 4017(J)
Iridium isotopes $Ir^{191}$
nuclear spins and moments, 6: 6158(J)
Iridium isotopes $Ir^{192}$
beta emission and conversion electrons, 6: 3713(J)
decay schemes, 6: 444(R), 2366, 6202(J)
formation by $\gamma$-rays on Pt, 6: 2181
gamma radiation following decay, 6: 1861
gamma spectra, 6: 446(R)
half-lives, 6: 1912(J)
handling and storage, 6: 2366
identification, 6: 2181
internal conversion and isomeric transition of, 6: 409
as source for $\gamma$ radiography, 6: 2366
Iridium isotopes $Ir^{193}$
nuclear spins and moments, 6: 6158(J)
Iridium isotopes $Ir^{194}$
formation by $\gamma$-rays on Pt, 6: 2181
Iridium isotopes $Ir^{195}$
identification, 6: 2181
Iron
(See also Cast iron; Steel.)
absorption of cosmic photons in, 6: 258(J)
absorption spectra in HCl, 6: 4735(J)
analysis for S and O by H reduction, 6: 1658(R)
bonding of electroplates of, to Zr, 6: 2670
corrosion by Bi – Pb eutectic, 6: 901
corrosion by $H_2O_2$, 6: 240(J)
corrosion by liquid Bi, 6: 900
corrosion by $HNO_3$ and $H_3PO_4$, 6: 5103(J)
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
corrosion inhibitors for, 6: 3567
corrosion of cathodes of, during electrolysis of fused NaOH, 6: 5102(J)
effects of radiation on concentration in blood serum, liver, spleen, and kidneys, 6: 4363(J)
fatigue failures in ingot, electron microscope studies, 6: 2663
gamma reactions ($\gamma$,n) at 320 and 160 Mev, 6: 1538
gamma reactions ($\gamma$,p), energy and angular distributions, 6: 5486(R)
incorporation into hemoglobin, rate of, 6: 5295(J)
infrared spectra, calculations, 6: 161(J)
ion exchange studies, 6: 1628
metabolism in Drosophila larvae, 6: 1982
neutron cross sections, 6: 1526
neutron diffraction pattern for, 6: 1038(J)
neutron inelastic-collision cross sections, 6: 5214
neutron inelastic scattering by, 6: 3662(J)
neutron inelastic scattering cross sections, 6: 5474(R)
neutron reactions (n,$\alpha$) and (n,p) in, cross sections for slow, 6: 6455(J)
neutron scattering, 6: 980
Iron (cont'd)
neutron scattering by, at various temperatures and neutron wave lengths, 6: 3663(J)
neutron scattering cross sections, 6: 493(J), 3425(J), 3674, 6702(J)
neutron total cross sections, 6: 5474(R)
neutron transmission cross sections, 6: 2479(J)
oxidation by Br, kinetics of, 6: 3744
oxidation-reduction reactions in solutions, mechanism, 6: 6529
penetrating cosmic showers originating in, multiplicity of, 6: 4824(J)
permeability by gas, 6: 1232(R)
preparation and physical properties of porous, 6: 1231(R)
proton elastic scattering cross sections, 6: 5692(J), 6179
radiometric determination in biological tissues, 6: 6525(J)
ranges of radiation in, 6: 5662
self-consistent field calculation for, 6: 4179(R)
spallation products of proton-bombarded, 6: 1862
spectral configuration interaction, matrix components, 6: 4672
spectrographic determination in organic solids, 6: 158
spectrophotometric determination, 6: 4724(R), 4735(J)
spectrophotometric determination in presence of U, 6: 6541
spectrophotometric determination in Zr and Zr compounds, 6: 2012
spectrophotometric determination of traces, in Zr using tiron, 6: 1656
stationary potential of spontaneous acid dissolution, 6: 4495(J)
stress and fatigue in Armco, 6: 4510(J)
surface tension and wettability data for, on ceramic oxides, 6: 2924
ultraviolet spectra obtained with échelle spectrometer, 6: 6203
Iron alloys
corrosion by $H_2O_2$, 6: 240(J)
corrosion by water, 6: 4776(R)
mechanical properties at high temperatures, 6: 2930
Iron – aluminum alloys
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
Iron biscyclopentadienyl
preparation and properties, 6: 4448
Iron – carbon – magnesium systems
corrosion, effects of impurities on, 6: 3573(R)
Iron – cerium alloys
constitution diagrams, 6: 912(J)
Iron – chromium alloys
corrosion by liquid Bi, 6: 900
crystal structure of $\sigma$ phase, 6: 5324(J)
intercrystalline corrosion by $HNO_3$ and $H_3PO_4$, 6: 5103(J)
Iron – chromium – cobalt alloys
phase studies, 6: 2086
Iron – chromium – cobalt – nickel alloys
creep properties, effects of coldwork on, 6: 1207
phase studies, 6: 2086
thermal rupture, effects of chemical composition on, 6: 5381
Iron – chromium – titanium alloys
isothermal transformation characteristics, 6: 2937(J)
Iron – cobalt alloys
recrystallization, 6: 5109(R)
recrystallization, effects of magnetic field on, 6: 601(R)
Iron complexes
equilibrium constants, 6: 535
Iron compounds
neutron scattering cross sections of paramagnetic, 6: 2468(R)
Iron(II) fluorides
neutron diffraction analysis, 6: 1548
Iron – gold alloys
phase studies, 6: 1467(R)
Iron ion complexes
electron transfer and redox reactions, 6: 3220
Iron ions
exchange reactions between, in aqueous solution, 6: 1182
inhibition of Ti corrosion by, 6: 588
magnetic susceptibility, 6: 4020
Iron(II) ions
electron transfer exchange reactions with Fe(III) ions, 6: 85, 572
exchange reactions with Fe(III) ions in perchloric and hydrochloric acid solutions, 6: 2294
oxidation in x-irradiated aqueous solutions, 6: 2630(J)
Iron(III) ions
colorimetric determination, 6: 4748(R)
electron transfer exchange reactions with Fe(II) ions, 6: 85, 572
exchange reactions with Fe(II) ions in perchloric and hydrochloric acid solutions, 6: 2294
reaction with stannous ions, 6: 1992
reduction in x-irradiated aqueous solution, 6: 2630(J)
spectrophotometric determination in HCl, 6: 1393(R)
stannometric determination, 6: 3234(J)
Iron isotopes
yield in high energy nuclear reactions, 6: 1628

Iron isotopes $Fe^{52}$
decay schemes, 6: 1628
Iron isotopes $Fe^{53}$
beta spectra and half lives, 6: 735
Iron isotopes $Fe^{54}$
binding energy, 6: 989(J)
gamma reactions (γ,n), 6: 1871(J)
mass, 6: 3128
photon reactions (γ,n), (γ,pn), (γ,2np), relative cross sections of, 6: 3078(J)
Iron isotopes $Fe^{55}$
energy levels, from (p,n) reactions on $Mn^{55}$, 6: 4633(J)
formation by neutron or deuteron reactions, 6: 1790
gamma continuum and K-capture transition energy, 6: 3712
gamma emission from, accompanying K capture, 6: 434(J)
gamma spectra, 6: 1923(J)
K capture in, transition energy determination for, 6: 2224(J)
mass compared to $Mn^{55}$, 6: 434(J)
Iron isotopes $Fe^{56}$
binding energy, 6: 333(J), 989(J)
deuteron reactions (d,p), 6: 2710
excited states from the $Mn^{55}$ (p,n) reaction, 6: 1877(J)
neutron activation cross sections, 6: 2168
neutron reactions (n,α), cross section, 6: 5479(J)
packing-fraction differences involving, mass-spectrographic measurement, 6: 2991
Iron isotopes $Fe^{59}$
crossover γ transition in, 6: 2224(J)
formation, 6: 496(R)
half-lives, measured by differential ionization method, 6: 1357(J)
internal conversion in $Co^{59}$ accompanying decay of, 6: 3868
preparation of purified for medical use, 6: 5886(J)
production and purification from $Co^{59}$ (d,2p), 6: 1790
Iron – magnesium alloys
corrosion, 6: 5605(R)
corrosion, effects of composition and heat treatment on, 6: 228(R)
corrosion, effects of impurities on, 6: 3573(R)
Iron – magnesium – phosphorous systems
corrosion, effect of composition and heat treatment on, 6: 228(R)
Iron – magnesium – silicon systems
corrosion, effects of impurities on, 6: 3573(R)
Iron – mercury couples
thermoelectric potential, 6: 5090(R)
Iron – nickel alloys
activity coefficients, 6: 2932(R)
phase transformations in, 6: 600(R)
powder metallurgy and physical properties of porous, 6: 1233(R)
strains in, caused by martensitic transformation, 6: 594
surface tension, effect of composition on, 6: 205
Iron – nickel – tantalum alloys
composition and physical properties, 6: 909(J)
Iron(II) nitrates
nuclear relaxation time, 6: 4937(J)
Iron(III) nitrates
nuclear magnetic resonance, 6: 3052(R)
Iron oxides
(See also Hematite; Magnetite.)
crystals, structure and performance as neutron monochromators, 6: 6411
precipitation from homogeneous solutions, 6: 2602(J)
Iron(II) oxides
electric conductivity, 6: 5397(R)
thermodynamic properties, calculation of, 6: 5564
Iron – oxygen – sulfur systems
equilibrium and vapor pressure in, 6: 6609
thermodynamic properties, 6: 3748(R)
Iron perchlorates
corrosive effects on Ag, 6: 889, 1468
Iron pyrites
(See Pyrite.)
Iron silicates
electric conductivity and transport numbers, 6: 2667(R)
Iron – silicon crystals
grain-boundary diffusion, 6: 5108(R)
Iron – silicon systems
crystal structure, 6: 1155
grain boundary diffusion, 6: 6610(R)
Iron single crystals
tensile properties, 6: 2083
Iron sulfates
corrosive effects on Ag, 6: 1468
oxidation by x radiation, 6: 146(J)
oxidation in irradiated solutions, 6: 556
Iron sulfates (cont'd)
radiation chemistry in a solution containing carbon dioxide, 6: 2328
radical pair yields from radioinduced oxidation of, 6: 5344
Iron(II) sulfates
as chemical radiation dosimeters, 6: 2996
oxidation by He ion bombardment, 6: 2809
oxidation in solutions of formic acid and $O_2$, 6: 3215
oxidation of solutions by electrons, 6: 2629(J)
oxidation of solutions by γ rays, 6: 2625(J)
oxidation of solutions by x rays, effects of alcohols on, 6: 6568(J)
Iron sulfide – copper sulfide systems
electric conductivity from 1180 to 1300°C, 6: 5397(R)
Iron – titanium alloys
constitution diagrams, 6: 3288, 5604
hardness numbers and heat treatment, 6: 5604
melting of, weight changes in, 6: 5604
metallography, 6: 3288
microstructure of melted, annealed, and homogenized, 6: 5604
oxidation in air at high temperature, role of N in, 6: 4799(J)
preparation, 6: 3288
surface tension, 6: 1449(R)
Iron – uranium alloys
magnetic susceptibility, 6: 1433
Iron – zinc alloys
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
Irradiation techniques
(See also appropriate subheadings under specific radiations and under specific materials, various animals, etc.; see also Radiation target cans; Radiotherapy.)
apparatus for β irradiation of grasshopper embryos, 6: 3887(J)
device for high-intensity, vacuum-irradiation of small biological samples at controlled temperatures, design and performance, 6: 4850
outdoor exposure pen for large animals, 6: 5255(J)
for producing γ-n and γ-p activities in betatrons, 6: 279(J)
for study of effects of chronic irradiation on growing plants using $Co^{60}$, 6: 5009
Isoleucine
metabolism in relation to 2-methylbutyric acid metabolism, 6: 5559
Isomers
(See also as subheading under specific isotopes.)
formation, 6: 4724(R)
Isopropyl ether – hydrochloric acid – water systems
phase studies, 6: 3766
Isoquinoline
reactions with hexafluorocyclobutene, 6: 2868(J)
Isoquinoline, 3-methyl-
reactions with hexafluorocyclobutene, 6: 2868(J)
Isotope separation methods
(See also appropriate subheadings under the isotopes of the elements.)
chemical exchange in thermal diffusion columns, 6: 3253(R)
Clusius-Dickel column, distribution of Ne isotopes along, 6: 2700(J)
distillation, 6: 2988(J)
equations and energy consumption of ideal cascade, 6: 4861(J)
ion hydration, 6: 5822(J)
lecture on, 6: 1282
thermal diffusion, 6: 2129
thermal diffusion, improving efficiency of columns for, 6: 6111
thermal diffusion, theory of binary mixture in, 6: 5144(J)
ultrasonic radiation, 6: 286
unsteady-state performance of cascades, solution of differential equations describing, 6: 2699(J)
Isotopes
(See also specific isotopes; see also Radioisotopes; Stable isotopes; Tracer techniques.)
abundance determination in natural and volcanic gas, collecting and purifying techniques, 6: 5142(J)
abundance in universe, 6: 1754
availability of stable, from ORNL Y-12 Area, 6: 4131
in determination of force constants of linear molecules, 6: 3043(J)
effects of isotope shift in atomic spectra, 6: 3398(J)
electromagnetically enriched, inventory, 6: 285, 5422
isomeric transitions, 6: 335
mass data, bibliography, 6: 5820(J)
mass spectrographic analysis of, systematic errors introduced by gas sample systems, 6: 2420
masses from Ti through Zn, 6: 3838(J)
nuclear properties, review, 6: 5185
relative abundances, bibliography, 6: 5820(J)
relative abundances, spectrographic determination of, 6: 1573(P)
separation in transition region between Knudsen and Poiseuille flows, 6: 5638(J)
thermal neutron capture cross sections, measured with ORNL pile oscillator, 6: 4623

Isotopic exchange
(See also subheading isotopic exchange reactions under specific materials.)
bibliography, 6: 5763(J)
between carbonates and bicarbonates, reaction mechanism and kinetics in, 6: 4470
Isotrons
design and development, 6: 3814

## J

Jeep reactor
(Norwegian)
design, 6: 1855
design and construction, 6: 3683(J)
fuel rod corrosion in, 6: 5101(J)
pictures, 6: 1002(J)
Jet Propulsion Lab., Calif. Inst. of Tech.
progress reports, 6: 1164(R), 1230(R), 1231(R), 1232(R), 1233(R), 5592(R)
Jets
(See also Liquid jets.)
drop formation, 6: 183
production of fast, from collapsing cylinders, 6: 3301
Johns Hopkins Univ.
progress reports, 6: 789(R), 2895(R)
Jones Mine (N.C.)
pegmatite minerals of rare earth type in, 6: 4496
Jordan
radioactivity in springs in, 6: 6600(J)
Journal bearings
analysis of theory and test results on, 6: 2646
test equipment for, 6: 2645

## K

K-capture
(See as subheading under specific isotopes; see Electron capture.)
KAPL intermediate power breeder
gas seals for control rods of, design and testing, 6: 1707
Kellex Corp.
(See also Vitro Corp. of America.)
progress report on development of laboratory waste disposal unit, 6: 6018(R)
Keratins
effects of radiation on, 6: 493(J)
Kerogen
concentration in oil shales, 6: 3782
Ketene
microwave spectra, 6: 548
Ketones
(See also Diketones.)
acylation, acid catalysis in, 6: 5985
acylation reactions with phenyl lithium intermediate, 6: 6300(R)
chelation of Ni in ethanol by acetylacetone, 6: 1995
fluorination, 6: 91(R)
migration of functional group of alkyl, 6: 5300
preparation of $C^{14}$-labeled, by Friedel-Crafts method, 6: 4450(J)
synthesis of alkyl, 6: 5300
synthesis of $\alpha$-substituted fluorinated, 6: 2348
synthesis of N-containing, 6: 6580
Kevatrons
(See also Cockcroft-Walton Accelerators.)
operational tests for, 6: 3412(R)
Kidneys
effects of radiation on Fe concentration of, 6: 4363(J)
failure, associated with hypertension following abdominal x irradiation, 6: 3172(J)
functional studies with labeled contrast media, 6: 4377(J)
permissible doses of x radiation for, 6: 3172(J)
toxicity of industrial poisons to, 6: 2835(J)
King Tutt Mesa
geophysical exploration, 6: 5597
Klystrons
(See Electron tubes.)
Knolls Atomic Power Lab.
(See also KAPL.)
progress reports, 6: 2038(R)
progress reports on health physics, 6: 6511(R)
progress reports on waste disposal, 6: 882(R)
Kolar Gold Field Mines
radioactivity survey, 6: 6358(J)
Krypton
atomic weight, 6: 3972(J)
collision probability for slow electrons in, 6: 1490
Krypton (cont'd)
diffusion coefficients in, 6: 4565(J)
fluorescence, 6: 409
ion pair production in, by $\alpha$ particles from Po, 6: 2974(R)
neutron scattering cross sections, 6: 679
Krypton isotopes
from fission, radioactivity of, 6: 1839
Krypton isotopes $Kr^{79}$
decay scheme and $K/\beta^+$ branching ratio, 6: 6196(J)
half life, 6: 2702(J), 3124(J)
ratio of L to K capture, 6: 6460(J)
Krypton isotopes $Kr^{83}$
nuclear energy levels, 6: 5519(J)
Krypton isotopes $Kr^{83}$
excited states and gamma emission, 6: 4671(J)
isomeric states, 6: 4670(J)
Krypton isotopes $Kr^{87}$
decay scheme of, $\beta$-spectrometer studies, 6: 6716(J)
Krypton isotopes $Kr^{89}$
angular correlation between electron and neutrino in decay, 6: 1909

## L

L-capture
(See Electron capture.)
Laboratories
(Design and construction; e.g., ventilation (including hood exhausts), heating, lighting, waste disposal, construction materials and services, etc.; see also Field laboratories.)
animal, design and air conditioning for, 6: 1373
drainage and ventilation systems of Chemistry-Metallurgy Bldg., Los Alamos, design criteria for, 6: 2037
electrical components in counting room of, design, 6: 2357
for handling materials with activites up to 100 mc, design, 6: 3998(J)
for handling radioactive materials, conference on design, 6: 5751
motion-picture film on design and safety in radiological, 6: 5281(J)
power system for nuclear research, 6: 4083
radiochemical, design and equipment for, 6: 6323
radiochemical, design and layout, 6: 5340(J)
for radioisotope research, design and equipment for, 6: 2040(J)
research, space requirements for, 6: 1416
Laboratory design conferences
on laboratories handling radioactive materials, 6: 5751
Laboratory for Nuclear Science and Engineering, Mass. Inst. of Tech.
progress reports, 6: 296(R), 407(R), 1483(R), 2584(R), 4724(R), 5395(R), 6619(R)
Laboratory furniture
(See also Dry boxes.)
design of hoods for radioactivity work, 6: 5339(J)
Lactates
biosynthesis mechanism in bacteria, 6: 3951(J)
metabolism in tumor and spleen cells, 6: 171(J)
Lactic acid
biosynthesis by fungus, 6: 532(J)
effects of radiation on aqueous, 6: 2888(J)
preparation of $C^{14}$-labeled Zn salts, 6: 4452(J)
Lactones
synthesis of 6-$C^{14}$-labeled D-glucurono, 6: 5762(J)
Lactose
synthesis of $C^{14}$-labeled, 6: 4758
Laminar flow
(See Fluid flow (laminar).)
Lamont Geological Observatory, Columbia Univ.
progress reports, 6: 5598(R)
Land Pebble Field Area (Fla.)
stratigraphy, 6: 5599
Lanthanides
(See Rare earths.)
Lanthanum
electric conductivity at low temperatures, 6: 5380
fractional-precipitation separation from Ce and Pr, 6: 1174(J)
ion exchange with U in uranyl nitrate, 6: 76
ion-exchange separation from Th, 6: 3256(J)
magnetic properties, 6: 4797(J)
Meissner effect, 6: 4804(R)
natural radioactivity, 6: 5508
natural radioactivity, search for, with proportional detector, 6: 6720
neutron scattering cross sections, 6: 5399(R)
oxidation in humid air, mechanism, 6: 4011(J)
separation from monazite, 6: 5069(J)
separation from Pr by fractional carbonate precipitation, 6: 6334(J)
spectrographic determination in rare earth mixtures, 6: 2308
tissue distribution in Drosophila larvae, 6: 1595
uptake and distribution in Drosophila, 6: 503

Lanthanum chlorides
activity coefficients, conductances, and transference numbers of, 6: 558, 562, 563
electric conductivity and activity coefficients in aqueous solution, 6: 2870(J)
high-temperature hydrolysis and crystal energy, 6: 1753
hydrolysis by water vapor, heat and free energy of the reaction, 6: 3536(J)
Lanthanum complexes
dissociation in aqueous solutions, 6: 564(J)
Lanthanum ferricyanides
electrolytic dissociation, 6: 841(J)
Lanthanum hydrides
crystal structure, 6: 6573(J)
identification of $LaH_2$, 6: 3764
Lanthanum isotopes
nuclear reactions, 6: 3110(J)
proton binding energy and shell structure in, 6: 3049(J)
radioactivity, 6: 3110(J)
Lanthanum isotopes $La^{128}$
decay schemes, 6: 1916(J)
half life, 6: 5508
natural radioactivity of, proportional counter studies, 6: 6712(J)
Lanthanum isotopes $La^{139}$
internal conversion coefficients, 6: 6624(R)
Lanthanum isotopes $La^{140}$
decay schemes, 6: 307(J), 3106
decay schemes, coincidence studies of, 6: 1917(J)
gamma spectra, 6: 307(J)
preparation of carrier-free, 6: 1422
radiocolloidal properties and separation from $Ba^{140}$, 6: 5753
Lanthanum–manganese alloys
magnetic properties and phase studies, 6: 2382(J)
Lanthanum–mercury alloys
crystal structure, 6: 3537(J)
Lanthanum–nickel alloys
magnetic properties, 6: 4797(J)
Lanthanum nitrates,
distribution between water and 1-hexanol, 6: 102
Lanthanum nitrides
identification of LaN, 6: 3764
Lanthanum oxides
cryoscopy in cryolite-NaF eutectic, 6: 3221(J)
heat content, specific heat, and entropy, 6: 147(J)
reaction with $H_2O$, 6: 4011(J)
Lanthanum scandates
dielectric properties, 6: 2075(J)
Lanthanum silicides
preparation and crystal structure, 6: 2335(J)
Larvae
iodine distribution in tissues of, 6: 111
life cycle and morphology of Ascardia galli hatched from x-irradiated eggs, 6: 4367
Lattice structure (crystals)
(See the subheading crystal structure under specific elements; see Crystal structure.)
Lattices (reactors)
(See appropriate subheadings under Reactors.)
Laurate ions
adsorption on barite, 6: 4497(R)
Lauric acid
adsorption density on barite, 6: 5368(R)
incorporation into phospholipides by rats, 6: 798(J)
Lauric acid, cholesteryl ester
synthesis, 6: 852
Lead
absorption of $\beta$ particles by, 6: 395(J)
absorption of cosmic electrons by, 6: 262(J)
absorption of cosmic photons by, 6: 258(J)
absorption of neutron-producing cosmic radiation in, 6: 2408(J)
absorption of 2-Mev x rays by, 6: 3430(J)
absorption spectra in HCl, 6: 4735(J)
abundance in meteorites, 6: 1754
alpha reactions, 6: 412
atomic heat near temperature of transition to superconductivity, 6: 2697(J)
bone deposition as function of parenteral dosage, in rats, 6: 5971
colorimetric determination by dithizone, 6: 4733
corrosion, 6: 2076(J), 2920(R)
corrosion by $H_2O_2$, 6: 240(J)
cosmic-meson interactions in, underground, 6: 2114(J)
cosmic meson and proton scattering by, coulomb and nuclear interactions in, 6: 6465
cosmic-ray interactions in, at 3260 m and 220 m, 6: 2685
Lead (cont'd)
cross section for pair production in, calculation, 6: 5191(J)
dynamic coefficients, 6: 245(J)
electrolytic separation and determination, 6: 1138(J)
electrolytic separation from V, 6: 90(R)
formation of $V^0$ particles by bremsstrahlung on, 6: 1872(J)
gamma absorption by, 6: 680(R), 1533, 1543, 5456(J), 6381(J)
gamma absorption by, ratio of K and L, 6: 2766(J)
gamma absorption coefficients, experimental and theoretical, 6: 5217(J)
gamma absorption in L shell, 6: 6182(J)
gamma reactions ($\gamma$,n) at 320 and 160 Mev, 6: 1538
gamma reactions ($\gamma$,p), 6: 2487(J)
gamma scattering by, 6: 3093(J), 5899(J)
gamma transmission, buildup factors for, 6: 2768(J)
gamma transmission, effect of $\gamma$ spectrum on, 6: 6466(J)
isomeric activity produced in, by neutrons, 6: 432(J)
isotope effect in superconductivity, 6: 3617(J)
meson scattering cross sections, 6: 319, 978(J)
meson total cross sections, 6: 4593
$\mu$-meson capture in, neutron production by, 6: 1759(J), 4174(J)
$\pi$-meson interaction cross sections, at very high energies, 6: 5405
$\pi^-$ meson scattering cross sections, 6: 319
$\pi^-$-meson total cross sections, 6: 2730(J)
$\pi^0$ mesons from, by photon reactions, 6: 317
$\pi^+$-meson cross sections, 6: 6427
$\pi^+$ mesons from, by proton reactions, 6: 2165(J)
neutron absorption cross sections, 6: 6164(J)
neutron inelastic-collision cross sections, 6: 5214
neutron scattering by, 6: 980
neutron scattering cross sections of, at 1.44 ev, 6: 3674
neutron total cross sections between 37 and 156 Mev, 6: 6449(J)
penetrating cosmic showers originating in, multiplicity of, 6: 4824(J)
penetrating showers produced in, by cosmic radiation, 6: 266(J)
penetration by high-energy cosmic particles in upper atmosphere, 6: 5130(J)
photon attenuation cross sections, 6: 2200
polarographic determination, 6: 1163
proton elastic scattering cross sections, 6: 3422(J)
proton reactions (p,n), neutron energy distribution from, 6: 2484
proton reactions (p,$\pi$), cross sections, 6: 3825
ranges of radiation in, 6: 5662
secondary-electron emission from, under $N_2$-ion bombardment, 6: 5486(R)
specific heat in the temperature range 1°K to 75°K, 6: 6372
spectrophotometric determination, 6: 4724(R)
spectrophotometric determination in carnotite ores, 6: 6053
stationary potential of spontaneous acid dissolution, 6: 4495(J)
Lead (liquid)
corrosive effects on Co, 6: 5601
heat transfer and corrosive effects, 6: 4057
solubility of steel and stainless steel in, 6: 5602
wetting by, 6: 5601
Lead acetates
isotopic exchange reactions, 6: 1626
Lead–bismuth alloys (liquid)
heat conductivity, variation with temperature and magnetic field, 6: 5362(J)
Lead–bismuth eutectic
corrosive effects on metals and alloys, 6: 901
heat-transfer characteristics under forced convection, 6: 1712
Lead–bismuth–gallium–tin alloys
preparation, 6: 4309(P)
Lead–bismuth–thallium–tin alloys
preparation, 6: 4308(P)
Lead carbonates
isotopic exchange reactions with $CO_2$, 6: 6526(R)
Lead chlorides
viscosity, temperature dependence of, 6: 6031(J)
Lead complexes
with tropolone and tropolone-derivative, formation constants of, 6: 6534
Lead glass
evaluation, for protection against x and beta rays, 6: 1961(J)
Lead isotopes
alpha disintegration energies, 6: 5522(J)
analysis, preparation of $PbI_2$ for, 6: 6053
isotope shift in spectra, 6: 3399(J)
primeval abundances and age of earth's crust, 6: 1755(J)
Lead isotopes $Pb^{206}$
gamma and x radiation from, accompanying $Po^{210}$ decay, 6: 5704(J)
gamma emission from, accompanying $Po^{210}$ $\sigma$ decay, 6: 2527, 2776
half life of isomeric state, 6: 1839
L x-ray emission following $\sigma$ decay of $Po^{210}$, 6: 2523
neutron absorption cross sections, 6: 6164(J)

Lead isotopes $Pb^{207}$
gamma emission accompanying $Bi^{207}$ decay, 6: 1915(J)
neutron absorption cross sections, 6: 6164(J)
neutron reactions, 0.9-sec isomer from, 6: 3688
Lead isotopes $Pb^{208}$
conversion electron of, accompanying $\beta$ decay of $Tl^{208}$, 6: 4267(J)
isotope shift in, effect of intrinsic moment of electron on, 6: 3129(J)
mass, 6: 3055, 3061(J)
Lead isotopes $Pb^{209}$
decay energy and $\beta$ spectrum, 6: 4261(J)
mass determination, 6: 1283
Lead isotopes $Pb^{210}$
beta radiation and conversion electrons from, 6: 3441(J)
beta spectra, 6: 418(J), 2782(J), 4986(J)
decay schemes, 6: 2229(J), 3248(R)
electron spectra, 6: 954(R)
electroplating, 6: 3765
gamma and x-ray emission in decay, 6: 4657
L x rays spectrum accompanying decay of, and possible Auger transitions, 6: 4666(J)
purification by electrolysis, 6: 3765
spectra, 6: 1304(R)
Lead isotopes $Pb^{212}$
beta decay of, accompanying internal conversion of $Bi^{212}$, 6: 4267(J)
internal conversion lines, 6: 995(J)
preparation of carrier-free, from Th emanation, 6: 4258(J)
tissue distribution and excretion, 6: 6513(J)
Lead isotopes $Pb^{214}$
radiations of, light particles in, 6: 2780(J)
Lead nitrates
fluorescent screen of $CdI_2$ mixed with, 6: 301(J)
self-absorption and self-scattering of $\beta$ particles by, 6: 1344
Lead oxalates
pyrolysis, C isotopic effects on, 6: 6526(R)
Lead–silver alloys
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
Lead single crystals
growth from melt, effect of thermal factors on, 6: 5786(J)
Lead, tetramethyl-
bond rupture in, accompanying decay of $Pb^{210}$, 6: 3248(R)
Lead–tin alloys
dynamic coefficients, 6: 245(J)
liquid-solid equilibrium diagram and energies of mixing, 6: 4516(J)
Lead–titanium couples
corrosion by synthetic ocean water, 6: 1236
Leak detectors
(See also the subheadings instrumentation and monitoring under reactors and specific processes; see also leak detection under Vacuum systems.)
based on optical absorption in Schumann region, design, 6: 879(J)
cold cathode mass spectrometer, 6: 584(J)
mass spectrometer type, design, 6: 3476(P)
for measuring tightness and inleakage of closed vessels, 6: 6215(P)
review, 6: 583(J)
for vacuum systems, design, 6: 4337(P)
for Van de Graaff accelerator tubes, design, 6: 4128(J)
Leaves
chlorophyll in, 6: 159
Lectures
on beta decay and fermion interactions, 6: 5790
on detailed balancing in atomic and nuclear physics, 6: 5858
on nuclear two-body interactions, 6: 5857
Lenses
(See Electromagnetic lenses; Optical systems; and instruments using optical systems.)
Leptons
interactions with nucleons, charge-independence of, 6: 5659(J)
unified description, 6: 3801(J)
Lethal dosage determinations
(See appropriate subheadings under specific radiations.)
Leukemia
clinical and biochemical studies, case histories, 6: 3734
desoxypentose nucleic acid content of nuclei in spleen cells in, 6: 5250
development of acute, following $P^{32}$ therapy of polycythemia vera, 6: 6521(J)
effects of $C^{14}$-formate on course of, in mouse, 6: 3928(J)
effects on metabolism in leukocytes, 6: 4344, 4682
induction and prevention, review, 6: 20(J)
resulting from chronic x ray and Ra exposure, case history, 6: 3901(J)
therapy with $Au^{198}$, aminopterin, and the two combined, 6: 2277(J)
Leukocytes
counting formula for standard error in, 6: 2567
distribution for counting, by a mechanical aid, 6: 2554
Leukocytes (cont'd)
increase in karyorrhexis following x irradiation in guinea pig, 6: 3903(J)
metabolism in, in health and leukemia, 6: 4344, 4682
phagocytic activity of, in vitro studies of effect of radiation on, 6: 4699(R)
relation between low counts and sickness, 6: 5929
total count, causes and extent of normal variation in, 6: 3184(J)
variations in count, from acute and chronic radiation exposures, 6: 3184(J)
Level indicators
design, 6: 3556(R)
design of oscillator-controlled, 6: 3474(P)
Light
(See also headings prefixed by Photo-. See also Infrared radiation; Optical systems; Quantum mechanics; Scintillation detectors; Ultraviolet radiation.)
effects on counting rate of a diamond $\alpha$-particle detector, 6: 4162(J)
effects on photographic film, 6: 1681(J)
forward scattering by a Coulomb field, theory, 6: 3420(J)
neutrino theory, inconsistency of, 6: 3653(J)
scattering by S hydrosols, 6: 3800(R)
small-angle scattering by a Coulomb field, 6: 3421(J)
velocity determination by hand spectrum method, 6: 4280
Light sources
(See also specific light sources.)
hollow-cathode discharge tubes, design and performance in spectrometers, 6: 2346
Lignite deposits (Mont.)
uraniferous, reconnaissance for, 6: 6599
Lignites
fluorimetric analysis for U, 6: 1136
Lime
(See Calcium oxides.)
Limestone
porosity, determination of radioactivity logging, 6: 5372(J)
Limestone deposits (N. Mex.)
geophysical exploration in Grants District, 6: 6355
Linear accelerators
(For belt-type electrostatic generators see also Van de Graaff accelerators see also Van de Graaff accelerators; see also Cockcroft-Walton accelerators; Kevatrons.)
beam focusing, radial, 6: 6177
d-c drain and breakdown phenomena for unoutgassed metals in accelerator tubes for, 6: 3086
design, bibliography, 6: 5893(J)
design and operation at MIT, 6: 1541
disk-loaded wave-guide dimensions, calculation, 6: 495.
dynamics, application of W.B.K. method to, 6: 3699(J)
effects of corrugation pitch on performance, 6: 6688
electromagnetic field in, calculation, 6: 5210(J)
electron, multiple-cavity design for 1.4-Mev, 6: 5888(J)
electron production in, 6: 1338(J)
energy distribution in beam, 6: 5485(J)
extension to operate in 3 Mev region, 6: 3387(R)
field strength in, determination of, 6: 377
heavy beam loading effects in, 6: 1337(J)
operation, 6: 1821(R)
particle dynamics in, 6: 713, 2502(J)
for protons, design, 6: 1026(J)
radial stability in, 6: 4232(J)
resonance maps for, 6: 5481
theory, 6: 6177
Linoleic acid
decarboxylation and reconstitution, 6: 1702
irradiation-induced antoxidation, 6: 6009(J)
oxidation as affecting enzyme inactivation, 6: 1590
synthesis of labeled, 6: 1702
Lipids
(See also Fatty acids; Phosphatides.)
effects of fasting on incorporation of acetate C in rat, 6: 3952(J)
effects of radiation on, determined by infrared spectroscopy of fractions from adult and developing brain, 6: 4351
extraction from brain tissue, 6: 3488
infrared spectra of, from brain fractions, 6: 4351
Lipoproteins
biosynthesis in rabbits fed cholesterol, effects of inositol and octadecyl alcohol on, 6: 3482
degradation, separation, and chromatographic analysis, 6: 4442
Liquefaction
(See as subheading under specific materials.)
Liquid drop models
(See Nuclear models (drop).)

Liquid flow
(See also Fluid flow.)
helical, in pipes, 6: 6348(J)
measurement in spherical containers, 6: 1440, 1441(R)
theory of solid-particle conveying by hydraulics, 6: 6347(J)
Liquid jets
hydrodynamic characteristics spark shadowgraph photography in study of, 6: 5252
Liquid metals
(See Metals (liquid).)
Liquids
Bose-Einstein, model solutions of non-degenerate Fermi-Dirac systems in, 6: 2387
coherent scattering processes in, theory, 6: 726(J)
effects of ionizing radiation on bubble formation, 6: 6419(J)
energy absorption by externally irradiated, 6: 1343
energy dissipation of ionizing radiation in, review, 6: 4707(J)
heat transfer in, 6: 1203(J)
radiation chemistry of, excited molecule theory, 6: 4000(J)
target assembly for cyclotron bombardment of, 6: 5211(J)
tensile strength, bibliography on, 6: 4041
thermal conductivities of, 6: 5595
viscosity, temperature dependence, 6: 6031(J)
viscosity measurements at high temperature, 6: 6035
wetting of solids by, effect of surface polarization on, 6: 5732
Lithium
abundance in primary cosmic radiation, 6: 5132(J)
analysis for H, 6: 2604
chromatographic separation from Na, 6: 848(J)
deuteron reactions (d,p), angular distribution measurements, 6: 3075
distribution between plasma and corpuscles in blood, 6: 16(J)
electrical conductivity and volume changes on fusion, 6: 5394(J)
electronic energy levels in lithium hydride, 6: 1303(J)
gravimetric determination of small quantities, 6: 821(J)
heat of solution in liquid $NH_3$, 6: 1121(J)
in human blood, quantity, 6: 17(J)
ion-exchange separation from Ca, 6: 3255(J)
melting apparatus for, 6: 3556(R)
$\pi^0$ mesons from, by photon reactions, 6: 317
neutron capture cross sections, measured by pile-oscillation method, 6: 3426(J)
neutron cross sections, 6: 2492(J)
origin in cosmic radiation, 6: 1754
pathological effects on Drosophila development, 6: 5964
polarographic determination in silicates, 6: 820(J)
production, properties, and uses, review, 6: 914(J)
proton-proton collisions in, 6: 3089
proton reactions (p,n), 6: 1859, 3079(J)
refining by distillation, effect of pressure on, 6: 1251(J)
spectrographic analysis, 6: 1145(J)
transitions to bound states of, calculations of probabilities for, 6: 4262(J)
volatilization rate in He d-c arc spectroscopy, 6: 2607(J)
Lithium (liquid)
corrosive effects, 6: 4057, 4493(R)
erosion and corrosion by, in metal-transport loops, 6: 4044(R)
heat transfer characteristics, 6: 4057, 4493(R)
viscosity, 6: 2006(J)
Lithium–aluminum–germanium alloys
phase studies, 6: 6366(J)
Lithium aluminum hydrides
reduction of $CO_2$ to HCOOH by, 6: 5043(R)
Lithium amide
crystal structure, 6: 1661(J)
Lithium borates
coloration, 6: 142(J)
cryoscopy in molten, 6: 541(J)
cryoscopy of fluorides in fused, 6: 3223(J)
Lithium borohydrides
exchange reactions with H gas, 6: 1176
Lithium chlorides
ionization, 6: 541(J)
Lithium compounds
as neutron-detecting phosphors, 6: 5843(J)
organic, bibliographies on use in organic synthesis, 6: 166
Lithium fluoride crystals
thermoluminescence of, from $\gamma$ bombardment, 6: 3990(J)
Lithium fluorides
angular dependence of paramagnetism on powdered and crystal form, microwave measurements, 6: 2242
heat of fusion and melting points, 6: 2592
thermal capacity from 0 to 900°C, 6: 2592
Lithium hydrides
electronic energy, quantum mechanical study, 6: 1303(J)
Lithium hydrides (cont'd)
four-electron quantum-mechanical model, energy of dissociation, 6: 4678(J)
three-electron bond of ions, quantum-mechanical interaction, 6: 4677(J)
Lithium hydroxides
dissociation pressure and heat of dissociation, 6: 5568
preparation and crystal structure, 6: 5305(J)
Lithium imide
preparation and crystal structure, 6: 1643(J)
Lithium iodide crystals
activated with $SnI_2$, use as neutron and gamma detector, 6: 3009(J)
activation by Tl, In, Sn, and Ag, 6: 1507
preparation and activation of, for use in neutron detectors, 6: 3817
Lithium iodides
luminescence, effects of temperature on, 6: 6125(J)
scintillation and luminescence, effects of temperature on, 6: 302(J)
Lithium ions
interaction of electron configurations, 6: 3750(J)
range correction for electron pick-up, 6: 6696
Lithium ions (recoil)
ionization by, from $B^{10}(n,\alpha)Li^7$, 6: 4944
Lithium isotopes
electrolytic separation from molten $LiNO_3$, 6: 946
reduction of Ce sulfate by, in pile-irradiated B solution, 6: 5066(J)
relative abundance, spectrographic determination of, 6: 6721
Lithium isotopes $Li^4$
formation by $Li^6(\gamma,2n)$, search for, 6: 5682(J)
Lithium isotopes $Li^5$
energy levels, from phase-shift analysis of p-$\alpha$ scattering, 6: 4964
inversion of doublet in compound nucleus from p-$He^4$ scattering, 6: 1900(J)
Lithium isotopes $Li^6$
deuteron cross sections, 6: 2488(J)
deuteron reactions (d,$\alpha$) and (d,p), 6: 710(J)
deuteron reactions (d,p), 6: 2485
deuteron reactions (d,p$\gamma$), angular correlations in, 6: 352(J), 2469, 5476(J), 5477(J)
disintegration by fast neutrons, 6: 3405
disintegration in nuclear emulsions, 6: 644
energy levels, 6: 338, 405, 1859
energy levels, from (p,d) reactions and proton scattering, 6: 3673, 6681
energy levels, from proton bombardment of natural Li, 6: 6156(J)
excited states, calculation of, 6: 5867(J)
gamma emission, 6: 2496(J)
gamma reactions, 6: 2196(J)
gamma reactions ($\gamma$,d) at 2.76 Mev, 6: 4941
mass difference $He^6$-$Li^6$, 6: 4229(J)
neutron reactions (n,$\alpha$), angular distributions and methods of data analysis, 6: 3684(R)
neutron reactions (n,$\alpha$), (n,d), (n,p), 6: 3405
preparation of targets of, 6: 536
range-energy curves for, in nuclear emulsions, 6: 397(J)
triton reactions, 6: 4225(J)
triton reactions (t,d), 6: 2186(J)
triton reactions (t,n), 6: 2757(J)
triton reactions (t,p), 6: 2186(J), 3080(J), 5474(R)
Lithium isotopes $Li^7$
angular correlations of $\gamma$ rays from, with deuterons and protons in $Li^6$ (d,p)$Li^{7*}(\gamma)Li^7$, 6: 2469
deuteron cross sections, 6: 2488(J)
deuteron reactions (d,p), 6: 3848(J)
energy levels, 6: 1880(J)
energy levels, from $Li^6$(d,p$\gamma$) reaction, 6: 5477(J)
energy levels, configuration of, 6: 3832(J)
energy levels, from (p,d) reactions and proton scattering, 6: 3673, 6681
energy levels, from proton bombardment of natural Li, 6: 6156(J)
energy levels, spin of first-excited, 6: 5476(J)
energy levels, spin of 7.4 Mev state, 6: 5866(J)
excitation energy of new level, 6: 3681(J)
excited state near 4.6 Mev from $Li^6$(d,p), 6: 3848(J)
formation of $H_2O_2$ by recoil atoms of, in pile-irradiated aqueous B solutions, 6: 5066(J), 5067(J)
gamma reactions ($\gamma$,$\alpha$), cross sections measured by using nuclear emulsions, 6: 4952(J)
gyromagnetic ratio, 6: 3059(J)
neutron capture cross section, extra-nuclear contribution to, 6: 1873(J)
nuclear magnetic moments, 6: 995(J)
nuclear magnetic resonance absorption-line broadening in metal, 6: 6445(J)
nuclear models, 6: 2749(J)
nuclear spin of excited state and isomeric transition, 6: 352(J)
proton reactions, 6: 985
proton reactions (p,$\alpha$), 6: 711(J), 2485
proton reactions (p,$\gamma$), angular distribution of radiation in, 6: 2191(J)

Lithium isotopes $Li^7$ (cont'd)
proton reactions (p,n), 6: 3688
proton reactions (p,n), excitation functions for, 6: 1021(J)
proton reactions (p,p'), $\gamma$ spectrum from, 6: 1918(J)
range-energy curves for, in nuclear emulsions, 6: 397(J)
sign of quadrupole interaction energy of, in $Li_2$ and Li halides, 6: 3836(J)
spectral absorption lines and quadrupole coupling of, in $LiAl(SiO_3)_2$, 6: 4931(J)
triton absorption cross section, 6: 1859
triton reactions, 6: 4225(J)
triton reactions (t,$\alpha$), energy distribution of $\alpha$ particles, 6: 4229(J)
triton reactions (t,2n), 6: 2757(J)
Lithium isotopes $Li^8$
cross section for formation by $Li^7(n,\gamma)$, 6: 1873(J)
range-energy curves for, in nuclear emulsions, 6: 397(J)
Lithium isotopes $Li^9$
formation by $B^{11}(\gamma,2p)$, 6: 5682(J)
formation by $C^{12}(p,4p)$, 6: 5646(J)
half life, 6: 5646(J)
Lithium–magnesium alloys
analysis for H, 6: 2604
Lithium niobates
preparation of anhydrous, 6: 3227(J)
Lithium oxides
preparation and crystal structure, 6: 5305(J)
Litter sizes
(See also Animal reproduction.)
effects of radiation of male rabbit on fetal mortality of his offspring, 6: 5940(R)
effects of radiation on, of mice, 6: 4352(R)
effects of radiation on, of rabbits, 6: 504(R)
Little, Arthur D., Inc.
progress reports, 6: 2913(R)
Little Mac Claims
torbernite occurrence, 6: 214
Liver
in biosynthesis of plasma proteins, 6: 5541(R)
carbohydrate metabolism in, 6: 758
carbon ($C^{14}$) distribution in fatty acids of, 6: 169(J)
carcinoma of, radiotherapy with $I^{131}$-labeled tetraiodophenolphthalein, 6: 4378(J)
effects of 1000-r x irradiation on desoxyribonucleic acid content, 6: 6508(J)
effects of radiation on, studies using $Au^{198}$, 6: 5266
effects of radiation on Fe concentration in, 6: 4363(J)
effects of sub-total hepatectomy on response to colloidal $Au^{198}$ injection, 6: 1379(R)
effects of x radiation on glycogenesis in guinea pig, 6: 3910(J)
functional studies with labeled contrast media, 6: 4377(J)
infrared spectra of sections of, from adult and fetal irradiated and non-irradiated rats, 6: 5258
metabolism in, effects of radiation on, 6: 56(J), 506(R), 1383(J)
metabolism of glycerol and pyruvate by, tracer studies in vitro, 6: 5036
metabolism of histidine by, 6: 4721
metabolism of thyroxine in, tracer study with $I^{131}$, 6: 6294
radioautographic analysis, 6: 3156
sensitivity to colloidal $Au^{198}$, effects of subtotal hepatectomy on, 6: 4694(R)
thorotrast metabolism by individual cells, nuclear emulsion studies, 6: 5040(J)
turnover rate of some intermediates of the phosphorylation cycle metabolism in, effects of alloxan diabetes on, 6: 3203
Liver diseases
effect of cirrhosis on protein metabolism, 6: 2279(R)
excretion of inorganic iodide in patients with cirrhosis, tracer studies, 6: 3945(J)
metabolism of histidine in, 6: 4721
Loaded plastics
shielding properties, 6: 3126(R)
Lode deposits
exploration for U in Grant Co., New Mexico, 6: 1457
exploration in Morocco, 6: 1460(J)
Lode deposits (uraniferous)
prospecting in Larimer Co., Colorado, 6: 1456
Lopo
(See Los Alamos water boiler.)
Los Alamos fast reactor
gamma spectra, 6: 998
Los Alamos Scientific Lab.
electronics equipment handbook, 6: 2976
Los Alamos water boiler
design and operating characteristics, 6: 999
design of Supo, 6: 1852
fast neutron spectra from, measurement, 6: 5468
Los Alamos water boiler (cont'd)
fuel solution handling system for, 6: 5469
gamma spectra, 6: 998
gas recombination system for, 6: 2178
Los Angeles
control of metallurgical and mineral dusts and fumes in, 6: 3737
Louisiana State Univ.
progress reports, 6: 2341(R)
Louisville Univ.
progress reports, 6: 1177(R)
Low pass filters
(See Electronic filters.)
Low temperature physics
(See Cryogenics.)
Lubricants
(See also Greases; Oils.)
bonding of $MoS_2$ to various materials to form solid lubricating film, 6: 2599
fluorination, 6: 4300(P)
Lubricity
(See as subheading under specific materials.)
Luminescence
(See also as subheading under specific materials; see also Fluorescence; Phosphorescence.)
applications in research problems, survey, 6: 6617
decay, of LiI, NaI, KI, NaI(Tl), and KI(Tl), 6: 302(J)
in firefly extracts, 6: 1134
of organic compounds, effects of structure on, 6: 2590(R)
in organic substances, mechanism of, 6: 5159(J)
potentiometric measurement in isolated spinach and mustard chloroplasts, 6: 1601(J)
of pure ice and tritiated ice, 6: 5581
transfer and transport of energy in sensitized solids exhibiting, 6: 6126(J)
Lungs
aerosol and Rn retention, 6: 4348(J)
clearance of insoluble foreign particles by, effects of radiation and physiological factors on, 6: 5552
distribution of radioactive metallic Au colloids coated with Ag in, 6: 2575(J)
pulmonary edema produced by air blast, effects of preadministration of substituted cholines on, 6: 5539
Lutetium isotopes $Lu^{175}$
decay schemes, 6: 4247(R)
gamma emission and K/L conversion electron ratios, 6: 1046
Lutetium isotopes $Lu^{176}$
low-energy $\gamma$ transitions in, 6: 2522
nuclear magnetic moment and comparison with nuclear shell model, 6: 342(J)
Lutetium isotopes $Lu^{177}$
decay schemes, 6: 3688
gamma rays accompanying $\beta$ decay, 6: 2173(J)
2,6-Lutidine
acylation to ketones, 6: 6580
Lymph
effects of x radiation on cellular composition of, 6: 1599, 3497(J)
Lymph system
(See also Leukocytes; Lymphocytes.)
effect of peripheral shielding on radiation injury of, 6: 5941(J)
Lymph volume
determination, 6: 1117(J)
determination using $I^{131}$-labeled albumin, 6: 25
Lymphocytes
bilobed occurrence, in cyclotron personnel, 6: 5011
deposition of transfused, 6: 2854(J)
effects of incubation, x radiation, adrenal cortex hormones, and an oxidation-reduction dye, in normal and malignant in vivo, 6: 6256(J)
in treatment of radiation injuries, 6: 1612
Lysine (labeled)
preparation of optically active, containing $C^{14}$ and $N^{15}$, 6: 4030(J)
Lysozyme
effects of ACTH on, 6: 9


## M


M-capture
(See as subheading under specific materials; see Electron capture.)
McCall, L. M. Mine (North Carolina)
pegmatite minerals of rare-earth type in, 6: 4496
MacGregor Claims (Colorado)
torbernite occurrence at, 6: 214
Magnesium
analysis for H, 6: 2604

Magnesium (cont'd)
cathodic sputtering, 6: 252
corrosion, effects of nonmetallic and alkali metal impurities on, 6: 2379(R), 3573(R), 5605(R)
corrosion of commercially pure and high purity, 6: 228(R)
determination in Na metal, 6: 815
electric conductivity, change on melting, 6: 1264(J)
electric conductivity, effect of impurities on, 6: 5789(R)
electric resistance and magnetoresistance at low temperatures, 6: 5622(J)
entropy and thermal capacity, 6: 6623(R)
furnacing and casting, 6: 2384(J)
heat of combustion, 6: 1131(J)
infrared spectra, 6: 161(J)
metallographic studies, 6: 2379(R)
neutron production by $\mu$-meson capture in, 6: 4174(J)
proton elastic scattering cross sections, 6: 3422(J)
proton scattering by, 6: 2710, 3095(J)
purification by vacuum sublimation, 6: 2379(R), 3573(R)
solubility in Cd, 6: 235(R)
specific heat between 1.8 and 4.2°K, 6: 5620(J)
spectrographic determination, 6: 1144(J)
spectrographic determination in organic solids, 6: 158
Magnesium (liquid)
electric conductivity, 6: 1264(J)
Magnesium alloys
bibliographies, 6: 904
corrosion, effects of impurities on, 6: 2379(R), 3573(R)
gravimetric analysis for Th and rare earths, 6: 6543(J)
lattice parameters, effect of temperature on, 6: 2876
photometric analysis for Al, 6: 2016(J)
Magnesium–aluminum alloys
corrosion, marine, 6: 5100(J)
corrosion mechanism of, 6: 248(J)
lattice-spacing relations in, 6: 6073(J), 6075(J)
pitting corrosion, 6: 6050(J)
reaction with steam, 6: 1257(J)
stress-corrosion mechanism in, 6: 1219(J)
stretcher–strain markings in, 6: 1252(J)
welding with A arc, 6: 5110(J)
Magnesium–aluminum–copper alloys
aging x-ray diffraction study, 6: 244(J)
constitution diagrams, 6: 243(J)
corrosion, marine, 6: 5100(J)
lattice-spacing relations in, 6: 6073(J)
Magnesium aluminum oxides
neutron-diffraction analysis, 6: 6314(J)
Magnesium–aluminum–silicon systems
annealing mechanism in, electron microscope studies of, 6: 2093(J)
grain refinement, effect of various additions, 6: 250(J)
Magnesium–aluminum–zinc alloys
corrosion, marine, 6: 5100(J)
corrosion, mechanism, 6: 248(J)
Magnesium borides
crystal structure, electron diffraction studies of, 6: 5065
Magnesium–cadmium alloys
entropy and specific heat, 6: 1472(R)
heats of formation, 6: 1480(J)
thermodynamic properties, 6: 1479(J), 4796(R)
Magnesium carbides
preparation, 6: 2641(J)
Magnesium–carbon systems
corrosion, effects of impurities on, 6: 3573(R)
Magnesium–carbon–iron systems
corrosion, effects of impurities on, 6: 3573(R)
Magnesium–cerium–thorium alloys
creep resistance and tensile properties, 6: 2097(J)
Magnesium chloride systems
electrical conductivity and density of fused binary chloride mixtures, 6: 2862
Magnesium chlorides
corrosion, effects of impurities on, 6: 3573(R)
electric conductivity, 6: 2862
Magnesium complexes
dissociation in aqueous solutions, 6: 564(J)
equilibrium constants, 6: 535
with 2-methyl-8-quinolinol, stability, 6: 1141(J)
with tropolone and tropolone-derivative, formation constants of, 6: 6534
Magnesium fluorides
chemical reactions producing HF, thermodynamic equilibria, 6: 6557
Magnesium–gadolinium alloys
magnetic susceptibility, 6: 6331(J)
Magnesium–iron alloys
corrosion, 6: 5605(R)
Magnesium–iron alloys (cont'd)
corrosion, effect of composition and heat-treatment on, 6: 228(R)
Magnesium–iron–phosphorus systems
corrosion, effect of composition and heat-treatment on, 6: 228(R)
Magnesium–iron–silicon systems
corrosion, effects of impurities on, 6: 3573(R)
Magnesium isotopes
deuteron reactions, energy, 6: 2185(J)
relative yields from $\gamma$ reactions $(\gamma,n)$ and $(\gamma,p)$ on, 6: 1874(J)
Magnesium isotopes $Mg^{23}$
beta spectra and half lives, 6: 735
mass difference $Mg^{23}$–$Na^{23}$ from $Na^{23}(p,n)$ threshold, 6: 3849(J)
Magnesium isotopes $Mg^{24}$
alpha reactions $(\alpha,\alpha)$, 6: 3686
alpha reactions $(\alpha,p)$, 6: 3686
angular correlation between 1.4-Mev $\gamma$ ray and inelastically scattered protons from, 6: 4236(J)
deuteron inelastic scattering by, 6: 1888(J)
deuteron reactions (d,p), excited states of $Mg^{25}$ from, 6: 5193(J)
deuteron reactions (d,p), studied with photographic emulsions, 6: 3389(J)
energy levels, from $Al^{27}(p,\alpha)$ reaction, 6: 4934(J)
gamma reactions $(\gamma,n)$, 6: 1874(J), 1876(J)
proton inelastic scattering by, angular distributions, 6: 4243(J), 5456(R
proton reactions (p,n), 6: 737
Magnesium isotopes $Mg^{25}$
deuteron reactions $(d,\alpha)$ and (d,p), 6: 1533
deuteron reactions (d,p) and $(d,\alpha)$, energy levels of $Mg^{25}$ and $Na^{23}$ from, 6: 4226(J)
deuteron reactions (d,p), studied with photographic emulsions, 6: 3389(J)
energy levels, from $Al^{27}(d,\alpha)$, 6: 2189(J)
energy levels, from $Al^{27}(d,\alpha)$ and $Mg^{24}(p,d)$, 6: 5193(J)
gamma reactions $(\gamma,p)$, 6: 1874(J), 1876(J)
proton reactions (p,n), excitation functions for, 6: 1021(J)
Magnesium isotopes $Mg^{26}$
deuteron reactions (d,p), 6: 1533, 3389(J)
deuteron reactions (d,p), energy levels of $Mg^{27}$ from, 6: 4226(J)
energy levels, from $Mg^{25}(d,p)$, 6: 4226(J)
gamma reactions $(\gamma,p)$, 6: 1874(J), 1876(J)
proton reactions (p,n), excitation functions for, 6: 1021(J)
Magnesium isotopes $Mg^{27}$
disintegration energy, 6: 2185(J)
energy levels, from $Mg^{26}(d,p)$, 6: 4226(J)
Magnesium–lithium alloys
analysis for H, 6: 2604
Magnesium–mercury alloys
wettability, contact angle measurements, 6: 6067(R)
Magnesium nitrates
distribution between water and 1-hexanol, 6: 102
Magnesium oxalates
precipitation from homogeneous solutions, 6: 2602(J)
Magnesium oxide–calcium oxide–zirconium oxide systems
phase studies, 6: 3604(J)
Magnesium oxide powders
thermal conductivity, 6: 5096
Magnesium oxide–uranium oxide systems
phase studies, 6: 3772
Magnesium oxide–zirconium oxide systems
constitution diagrams, 6: 3604(J)
Magnesium oxides
recrystallization and sintering mechanisms, 6: 117
thermal conductivity, 6: 204
thermal conductivity, measurement of, 6: 6588(R)
Magnesium sulfates
electrical conductivity under high field excitation, measurement, 6: 3747
electrolytic dissociation, 6: 841(J)
Magnesium sulfides
solid solutions with Ce sulfides, 6: 4012(J)
Magnesium–thorium alloys
creep resistance, tensile properties, and thermal conductivity, 6: 2097(J)
Magnesium–thorium–zirconium alloys
metallurgical properties, 6: 903(R)
Magnesium–uranium alloys
metallography with polarized light, 6: 1228
Magnesium uranyl carbonates
preparation and properties, 6: 5087(J)
Magnesium–zirconium alloys
constitution diagrams, 6: 591(R)
creep, effect of rare earths on, 6: 4079(J)
phase studies, 6: 4505(R)
spectrophotometric analysis for Zr, 6: 6310(J)

Magnetic fields
(See also as subheading under specific devices; see also Electric fields; Electromagnetic fields; Fluxmeters.)
circuit for stabilization of the Louvain cyclotron (Belgium), 6: 1542(J)
control, by magnetic potential divider, 6: 3809
control system, continuously variable 0.5 – 100 amp, 6: 5135
correction of magnetic lenses in beta spectrometry, 6: 281(J)
effects on angular correlation of emitted particles, 6: 346(J)
focusing of charged particles with, 6: 450(J)
inhomogeneous, trajectories of charged particles in, 6: 6642(J)
magneto-hydrodynamic effects on thermal convection, 6: 1715(J)
measurements, voltage integrator for, 6: 2415
method for contouring flux intensity from magnetic surface, 6: 4315(P)
nutational resonance in, 6: 2473(J)
spin-spin relaxation in, 6: 2548(J)
theory of $H_2$ and $D_2$ in, 6: 1828(J)
vacuum polarization, 6: 1365(J)
Magnetic lenses
(See Electromagnetic lenses; Magnetic fields.)
Magnetic moments
(See also subheadings for nuclear, atomic, and molecular magnetic moments under specific materials; see also Nuclear magnetic moments.)
measurement applied to chemical analysis, 6: 1142(J)
of a nucleon, theory, 6: 684(J)
of system of interacting spins, in external magnetic field, 6: 2548(J)
Magnetic monopoles
theory, 6: 4997(J)
Magnetic resonance
(See as subheading under specific materials.)
Magnetic susceptibility
(See also as subheading under specific materials.)
measurement, 6: 1433
periodic variation in, equipment and procedure for measuring, 6: 2945
Magnetism
Heisenberg's model of ferro-, 6: 2166(R)
theory of ferro-, 6: 6674(R)
Magnetite
(See also Iron oxides.)
neutron diffraction analysis, 6: 1038(J)
recovery of V from titaniferous, 6: 911(J)
Magnetrons
(See Electron tubes.)
Magnets
permanent, for spectrographs and nuclear physics research, 6: 4858(J)
Maize
(Indian corn; Zea mays)
chromosome crossing-over in, 6: 3891
effect of oxygen concentration on x-ray-induced chromosome breakage in, 6: 5942(J)
genetics, 6: 1946
mutations in plants from irradiated seed, 6: 774(J)
phosphorus uptake by, using $P^{32}$ in field studies, 6: 2843(J)
response to inoculation with Ustilago zeae, 6: 499
sterility in, involving gene-cytoplasm interaction, 6: 2
sucrose content in stalks of, 6: 2804
Maleic anhydride
synthesis of $C^{14}$-labeled, 6: 5079(J)
Malic acid
biosynthesis by conversion of $\alpha$-ketoglutaric-1,2-$C_2^{14}$ acid in pigeon breast muscle, 6: 1620(J)
Malic acid, sodium salts
radiosensitivity effects, 6: 6276(J)
Malonic acid
decarboxylation, C isotope effects in, 6: 831, 2863(J), 2864(J), 3211(R), 5299, 5560, 5729, 6526(R)
Malonic acid, bromo-
decarboxylation, C isotope effects in, 6: 5299, 5729, 6526(R)
Malonic acid, esters
chelation of Ni in ethanol by, 6: 1995
hydrolysis, carbonate cleavage in, 6: 817
Malononitrile
radiosensitivity effects, 6: 51(J)
Maltose
synthesis of $C^{14}$-labeled, using an enzyme preparation from N. meningitidis as a catalyst, 6: 5585
Mammals
(See also specific mammals.)
effects of radiation on gene mutations and chromosome aberrations in, 6: 5717
radiation injury and lethality in, analysis of, 6: 4361(J)
Man
ages of embryos of mice and, table and graph for estimating equivalent, 6: 3149
Mandelic acid, m-azo-$\beta$-naphthol-
synthesis and use in Zr determination, 6: 6307(J)
Manganese
atomic weight, 6: 3972(J)
localization in pancreatic juice, tracer studies, 6: 3947(J)
neutron resonance cross sections, 6: 1304(R)
neutron scattering cross sections, 6: 1304(R)
neutron transmission cross sections, 6: 2479(J)
paramagnetic resonance absorption in solutions containing, 6: 1312(J)
separation from Fe, for fast-neutron threshold detectors, 6: 5298(R)
solvent extraction from Fe, 6: 4724(R)
thermal neutron activation cross sections, 6: 6456(J)
Manganese alloys
sigma phase in, 6: 1246(J)
Manganese–aluminum alloys
electric resistance and magnetoresistance at low temperatures, 6: 5622(J)
pitting corrosion, 6: 6050(J)
Manganese–aluminum–titanium alloys
arc melting, weight loss during, 6: 5384(R)
constitution diagrams, 6: 4792(R), 5384(R)
phase studies, 6: 5384(R)
Manganese–carbon–titanium systems
phase studies, 6: 6061
Manganese–chromium alloys
phase studies, 6: 1259(J)
Manganese compounds
hyperfine structure, 6: 1312(J)
paramagnetic resonance and hfs of divalent, 6: 1847(J)
Manganese fluorides
angular dependence of paramagnetism on powdered and crystal forms, microwave measurements, 6: 2242
neutron scattering by, 6: 2511(J)
Manganese (II) fluorides
neutron diffraction analysis, 6: 1548
Manganese ions
magnetic susceptibility, 6: 4020
Manganese isotopes $Mn^{53}$
energy levels, from $Cr^{53}$(p,n), 6: 359, 4633(J)
Manganese isotopes $Mn^{54}$
energy-level spacing in, as compound nucleus, 6: 2497(J)
energy levels, from $Cr^{54}$(p,n), 6: 359
Manganese isotopes $Mn^{55}$
energy-level spacing in, as compound nucleus, 6: 2497(J)
mass, compared to $Fe^{55}$, 6: 434(J)
proton reactions (p,n), 6: 407(R), 1877
Manganese isotopes $Mn^{56}$
half lives, determination by automatic recording electroscope, 6: 5417(R)
Manganese–lanthanum alloys
magnetic properties and phase studies, 6: 2382(J)
Manganese–molybdenum–titanium alloys
analysis, 6: 5384(R)
constitution diagrams, 6: 4792(R)
Manganese–nitrogen–titanium systems
phase studies, 6: 6062(R)
Manganese oxides
catalytic effects in reduction of permanganates, 6: 3514
neutron scattering by, 6: 2511(J)
Manganese sulfates
nuclear magnetic resonance, 6: 3052(R)
Manganese–titanium alloys
effect of microstructure on mechanical properties, 6: 5783(R)
phase studies, 6: 1732, 5384(R)
quench hardening, literature survey to evaluate nature of, 6: 5609
Manganese–uranium alloys
magnetic susceptibility, 6: 1433
Mannitol
synthesis of labeled, 6: 1700
Mannose
synthesis of labeled, 6: 1430
Manometers
(See also Pressure gages; Vacuum gages.)
adsorption type, measurement of pressures under $10^{-7}$mm Hg by, 6: 3278(J)
design, 6: 2949(J)
design and performance, 6: 944(J)
ionization, review, 6: 4490(J)
precision differential, design and operation, 6: 5138(J)
recording mercurial for pressure range 0-760 mm Hg, 6: 3804
Manuals
(See as subheading under specific processes and equipment; see Handbooks and manuals.)
Mass spectrographic analysis
(See also as subheading under specific materials.)

Mass spectrographic analysis (cont'd)
of isotopes, systematic errors introduced by gas sample systems, 6: 2420
magnetic time-of-flight mass spectrometer used in, 6: 5424
preparation of Pu and U samples for, 6: 5238
Mass spectrography
(See also subheading mass spectrographic analysis under specific materials.)
dissociation of ions by molecular collision in, 6: 4136(J)
ionization potentials determined by, 6: 291(J)
recent developments in, 6: 1793
superposition method in abundance analyses, 6: 4865(J)
Mass spectrometers
(See also Ion sources; Isotrons.)
aberration of magnetic-sector-type, calculation, 6: 4863(J)
application to high vacuum problems, 6: 585(J)
for assay of H isotopes, design, 6: 3347(J)
automatic recording, operation, 6: 288
for cosmic-ray particle mass and trajectory determination, design, 6: 4530(J)
design, 6: 473(P), 1284(J)
design and operation of various types, 6: 4862
design and resolution, 6: 1793
in determination of heat of vaporization of C, 6: 6654
determination of ionization efficiency by, 6: 3363(J)
with diatron-20 analyzer tube, design, 6: 5824
electrostatic time-of-flight, design and operation, 6: 289
emission regulator for, 6: 3620
free molecular flow in sample inlet and pressure decrease in sample reservoir, 6: 6113(J)
gas handling systems, influence of fractionizing and viscosity effects in, 6: 3621(J)
ion current, method of measuring, 6: 2422(J)
ion intensity control system, 6: 6233(P)
for ion-optic studies, design, 6: 4134(J)
ion paths in, 6: 3697(J)
ion source for, 6: 1574(P), 1580(P), 5828
as leak detectors and for analyzing H-D mixtures, 6: 1371
linear, for separating mixed isotopes, 6: 6226(P)
linear r-f, design, 6: 2703(J)
magnetic time-of-flight, application to analytical problems, 6: 5424
mass doublet comparisons with, 6: 991(J)
molecular leads for, 6: 2132(J)
neutralization of space charge in positive ion beams in, 6: 636(J)
Nier-type, operation and performance, 6: 6656(J)
Nier-type isotope ratio, presence of organic background peaks in operation of, 6: 5825
optimum geometrical conditions for, 6: 4133(J)
for range 1 to 75 mass units, design, 6: 3347(J)
recording system for, 6: 6657(J)
registration circuit for, 6: 4567(J)
for solids study, design, 6: 3338(R), 5830(R)
space charge and magnetic saturation effects, 6: 4135(J)
for stable isotope separation, design, 6: 2419(J)
suppression of spurious ions in, 6: 972(J)
time-of-flight, design, 6: 2901
theory, 6: 3347(J)
vacuum lock for routine solid analysis with, 6: 3630
vapor flow control by electronic valve operation, 6: 6220(P)
Mass synchrometers
performance, 6: 626
Massachusetts Inst. of Tech.
(See also headings in the form Mineral Engineering Lab., Mass. Inst. of Tech.; and Research Lab. of Electronics, Mass. Inst. of Tech.)
progress reports of solid-state and molecular theory group, 6: 2166(R)
progress reports on food sterilization with a $Co^{60}$ source, 6: 3889(R)
progress reports on fundamentals of cold working and recrystallization, 6: 1470(R), 4795(R), 5386(R), 6612(R)
progress reports on machine methods of computation and numerical analysis, 6: 2993(R)
progress reports on measurement of thermal conductivity of refractory materials, 6: 1448(R), 5098(R), 6588(R)
progress reports on metal-ceramic compositions for high-temperature service, 6: 1449(R), 2655(R), 5097(R)
progress reports on mineral engineering, 6: 251(R), 2073(R), 3293(R), 3294(R)
progress reports on solid solutions and grain boundaries, 6: 598(R), 1467(R), 4794(R), 5107(R), 5782(R), 6611(R)
progress reports on thermodynamics of metal solutions, 6: 1471(R), 4507(R), 6606(R)
progress reports on turbulence and diffusion of particulate matter in the atmosphere, 6: 676(R), 1516(R), 1517(R), 1518(R), 1519(R), 1520(R), 3041(R)
Massachusetts Inst. of Tech. (cont'd)
progress reports on x-ray study of radiation damage, 6: 3433(R), 5504(R)
Masurium
(See Technetium.)
Materials of construction
(See Building materials.)
Materials testing
(See also the specific material or equipment concerned or properties being tested; see also Mechanics; Metallurgy.)
equipment for fatigue testing, 6: 193(J)
by gamma-ray transmission, 6: 191
Mathematical analysis
(See as subheading under the phenomena or process analyzed.)
Mathematical tables
(See also Mathematics.)
of functions associated with Serber-Wilson method for neutron-diffusion calculations in a spherical geometry, 6: 3660, 3661, 3830
for multi-velocity Serber-Wilson calculations as applied to infinite spherical reflectors, supplementary to LA-1364, LA-1365, LA-1366, 6: 4573
Mathematics
(Including statistics; see also specific problem for application of mathematics; also specific mathematical methods, e.g., Monte Carlo Method; Stochastic methods; etc.; see also Computers; Constants and conversion factors; Fourier transforms; Harmonic analysis; Perturbation theory; Racah coefficients; Statistics.), 6: 1561
in analysis of noise, $\gamma$ spectra, and $\gamma$-ray scattering and transmission, 6: 1285
applied to solid-state and molecular theory, 6: 2166(R)
approximate computations applied to the penetrations of x rays, 6: 3706
approximate functions of, 6: 4138
asymptotic solutions of Volterra integral equations, 6: 3622
calculation of eigenvalues of differential systems, 6: 953
calculation of orbital and charge-spin correlations, 6: 1364(J)
calculus applicable to analysis and synthesis of linear physical systems, 6: 2424
classification of symmetrical type of convex regions, 6: 1796
convex bodies, symmetrization, 6: 949
convex regions associated in subspaces, 6: 948
convex sets and additive set functions, 6: 950
convex sets in abstract linear space, 6: 4568, 4570
determining second degree curvature, 6: 3350
difference equation approximations, 6: 952
diffusion equations of electron-photon and nucleon cascades, 6: 5800(J)
eigenvalue problems, iterative method for solution, 6: 2705(J)
equivalence of S-matrix in different representations, 6: 2231(J)
impulse approximation, 6: 2798(J)
monotonic set functions and convex sets, 6: 2994
in neutron transport theory, 6: 1285
orthogonal boundary polynomials in eigenvalue problems, 6: 4571
quantum-mechanical partition function for assembly of similar particles with central interaction, 6: 5826(J)
set theory in, randomness of an arithmetic function, 6: 4139
solution of unsteady-state heat conduction problems by method of Crank and Nicolson, 6: 3348
statistical errors of expansion coefficients of experimental angular distributions, 6: 5883(J)
unitary transformations, 6: 5146
variational method for calculation of eigenvalues of hermitian operators, 6: 6486(J)
variational principles in scattering theory, 6: 5494(J)
Mating
(See also as subheading under the specific animal.)
effects of radiation on, in paramecia, 6: 506(R), 6241
Maury shales (Tennessee)
x-ray-diffraction analysis, 6: 3781(R)
Mechanics
(See also Materials testing.)
book: Dimensional Analysis and Theory of Models, 6: 1204
response of yielding vibratory system to transient forcing functions, 6: 2676
Melting point apparatus
design of window shield for, 6: 1445
Membranes
(See also Monomolecular films.)
plastic, flow of gases through, 6: 4113
plastic, separation of gases by, 6: 4553(J)
Mercaptans
(See Thiols.)
Mercapto group
amperometric determination in irradiated yeast cells, 6: 2605

Mercapto group (cont'd)
plasma levels of, during growth and regression of rat lymphosarcoma, 6: 5544
prophylactic uses in radiation injury, 6: 5716(R)
β-Mercaptoalanine
(See Cysteine.)
Mercury
absorption of $Co^{60}$ γ rays in, 6: 2203(J)
absorption spectra in HCl, 6: 4735(J)
boiling and condensing, 6: 579
detection, manual for UCRL portable vapor detector model 1EPS, 6: 5420
gravimetric and volumetric determination using 2-(ω-hydroxyphenyl)-benzimidazole as reagent, 6: 5315
heat transfer to, 6: 5594
heat transfer characteristics, effect of wetting on, 6: 2386(R), 4483, 4484(R)
heat transfer coefficients of condensing vapor, 6: 5090(R)
heat transfer to and from flowing, 6: 1199
hyperfine structure of green line, interferometric measurement, 6: 3448(J)
hyperfine structure studied with echelle spectrometer, 6: 6203
interfacial effects between steel and, 6: 4483
isotopic exchange between valence states, 6: 2621
K-Auger electron yields, 6: 5912
mass transfer by, 6: 2362(R)
neutron absorption by, reactor oscillator studies, 6: 4917(J)
neutron capture cross sections measured by pile-oscillation method, 6: 3426(J)
pair-production cross section in atomic field of, calculation assuming Hartree model, 6: 5687(J)
photosensitization of cycloparaffin decomposition by, 6: 2858
potential function for, 6: 2385
self-diffusion, 6: 1239(R), 4727
spectrochemical determination in NaK alloys, 6: 2013
superconductivity, isotopic factors in, 6: 993(J)
thermal conductivity, 6: 6067(R)
thermodynamic properties at zero pressure, 6: 3803
tissue distribution in rats, 6: 496(R)
viscosity, temperature dependence of, 6: 6031(J)
viscosity of vapor, 6: 2385
wettability, contact angle measurements on steel, 6: 6067(R)
Mercury cathodes
design and use of micro, for electrolysis, 6: 1648
electrodeposition of metals on, 6: 1393(R)
Mercury–copper couples
thermoelectric potential, 6: 5090(R)
Mercury fluorides
as fluorinating agents, 6: 3984(J)
Mercury ions
resonance overcharge in collision with alkali metals, 6: 4526(J)
Mercury–iron couples
thermoelectric potential, 6: 5090(R)
Mercury isotopes
alpha emission from, 6: 410, 1556
half lives, 6: 1839
level width and g-factor for $^3P_1$ state of, 6: 3876(J)
resonance radiation capture in mixed, 6: 2950(J)
specific heat, 6: 993(J)
superconductivity, bibliography, 6: 5795(J)
Mercury isotopes $Hg^{196}$
energy levels, from $Au^{196}$ β decay, 6: 5705(J)
Mercury isotopes $Hg^{197}$
decay schemes, 6: 1925(J), 3873(J)
electron emission spectra, low-energy, 6: 3872(J)
energy levels and decay schemes, 6: 2536(J)
formation, 6: 496(R)
Mercury isotopes $Hg^{198}$
energy levels, 6: 435(J)
energy levels, spins of, 6: 5511(J)
energy levels and spectra, 6: 2541(J)
gamma emission by, 6: 2714(J)
half lives of excited states, 6: 426(J), 2220(J)
internal conversion of 0.411-Mev γ ray, 6: 4265(J)
isomers, upper limit to half lives, 6: 1555
Mercury isotopes $Hg^{199}$
decay schemes, 6: 1925(J)
gamma emission by, 6: 2714(J)
half lives of excited states, 6: 426(J)
hyperfine structure of green line due to, 6: 3448(J)
internal conversion in, accompanying $Au^{199}$ decay, 6: 4270(J)
nuclear orientation by polarized light, 6: 3060(J)
Mercury isotopes $Hg^{202}$
energy levels and spectra, 6: 2541(J)
Mercury isotopes $Hg^{203}$
decay schemes, 6: 307(J), 2536(J)
Mercury–lanthanum alloys
crystal structure, 6: 3537(J)
Mercury–sodium alloys
wettability, contact angle measurements, 6: 6067(R)
Mercury–uranium alloys
chemical analysis, 6: 545
crystal structure, 6: 3537(J)
Merry Widow Claim (New Mexico)
geology, 6: 1457
Mesic atoms
x-ray emission of, of Be, C, and O, 6: 5650
Meson beams
production in 184" cyclotron by bombarding Be target with protons, 6: 3368
production of μ, in cyclotron, 6: 322
production of 62- to 85-Mev, 6: 4593
Meson cross sections
(See also subheadings in the form meson scattering cross sections under specific materials.)
measurement, 6: 3076
total-absorption and inelastic-scattering, for 113- and 137-Mev $\pi^-$, 6: 6139(J)
Meson decay
(See also appropriate subheadings under Mesons.)
infrared catastrophe-like divergency in, 6: 3123(J)
perturbation theory applied to, 6: 3653(J)
π to μ, model for, 6: 1756
π to μ, unusual tracks in nuclear emulsions from, 6: 4177(J)
theory, 6: 5790
Meson reactions
(See as subheading under the material acted upon.)
Meson showers
angular distribution of particles in, 6: 5652(J)
charge ratio of particles in, 6: 5652(J)
detection and measurement by photographic methods, 6: 3386(R)
statistical theory, 6: 4165(J)
Meson spectra
zenithal distribution, 6: 1299(J)
Meson theory
coupling features of, 6: 6622(R)
derivation using Bloch-Nordsieck's method, 6: 3369(J)
deuteron ground state and low energy neutron-proton scattering investigated by, 6: 4212(J)
Dirac equation for nucleons, physical interpretation, 6: 4676
fourth-order static nuclear potentials in symmetrical pseudoscalar, 6: 4626(J)
intermediate-coupling, for pseudoscalar mesons with pseudoscalar coupling, 6: 4598(J)
limitations, and contrast with phenomenological theory of nuclear forces, 6: 1306(J)
neutral vector and scalar, and classical equations of motion of point particles, 6: 5525(J)
nonlinear pseudoscalar, and nuclear saturation, 6: 5171(J)
of nuclear forces, new method of, 6: 3652(J)
of nuclear forces, nonlinear, 6: 1819
of nucleon structure, 6: 5460
μ-pair theory with pseudoscalar coupling nuclear phenomena deducible from, 6: 3826(J)
pion-proton scattering and strong-coupling, 6: 4164(J)
potential well for heavy nuclei by using nonlinear, 6: 3396(J)
pseudoscalar, pseudoscalar and pseudovector coupling in, 6: 4608(J)
pseudoscalar, the electron-neutron interaction in, 6: 4183(J)
quantization of neutral scalar, with nonlinear coupling, 6: 4903(J)
regular meson potentials in low-energy proton-proton scattering, 6: 5653(J)
renormalized S-matrix for scalar electrodynamics, 6: 4679(J)
static interaction potential between nucleons deduced from, influence of relativistic corrections, 6: 5244(J)
symmetrical pseudoscalar, of neutron-proton interaction, 6: 4609(J)
symmetrical pseudoscalar, of nuclear forces, 6: 5457
Mesons
(See also Cosmic mesons; see also specific types, e.g., Mesons(π); Mesons($\pi^+$); etc.)
adiabatic nuclear potentials from, theory, 6: 3138(J)
from carbon ($C^{12}$), by proton reactions, 6: 974
cloud around nucleons, properties of, 6: 750(J)
cloud around nucleons, quantum theory of, 6: 2459(J)
cohesive, theory and mass difference, 6: 3141(J)

Mesons (cont'd)
contribution to electron-neutron interaction, 6: 6676(J)
correction of $\beta$ decay due to, 6: 3121(J)
creation by fast neutrons passing through nuclei, theory, 6: 330(J)
coupling to nucleons, experimental tests of charge-symmetry hypothesis in, 6: 3048(J)
current of, around nucleons, 6: 4603(J)
decay schemes, 6: 1756, 3386(R)
decay schemes of neutral scalar heavy, 6: 3016
detection and measurement, 6: 1756
detection and measurement by photographic and electrical methods, 6: 3386(R)
from deuterium by photon reactions, 6: 3040(J), 3651(J)
double scattering of pseudoscalar, by nucleons, 6: 4910(J)
field theory, configuration space methods in, 6: 2233(J)
fields of, $\beta$-matrices for, 6: 4574(J)
fields of, intermediate interaction of nucleons with, 6: 1825(J)
formation and scattering, theory, 6: 1544
heavy, review of properties, 6: 5850(J)
heavy, selection rules imposed by charge conjugation and charge symmetry, 6: 5923(J)
interactions and decay, 6: 673(J)
interactions, renormalized S-matrix for, 6: 3017(J)
interactions, selection rules for, 6: 2546(J)
interactions of scalar, with V particles, 6: 4604(J)
interactions with electrostatic field, 6: 1369(J)
interactions with nucleons and photons, 6: 1055(J)
lifetime measurements in cloud chambers, technique, 6: 6137(J)
mass of C', and self energies of nucleons, 6: 2729(J)
mass and decay schemes, measurement, 6: 1515(J)
mass needed to reconcile experimental and theoretical n-p cross sections, 6: 5493(J)
mass needed to reconcile experimental and theoretical results on proton-proton scattering, 6: 5653(J)
mean life as function of momentum, determination, 6: 3387(R)
multiple production, theory, 6: 325(J), 2456(J), 4946
multiple production by cosmic particles, 6: 267(J)
multiple production by nucleon-nucleon collisions, theory, 6: 674(J)
multiple production in cosmic showers on paraffin and graphite, 6: 4829(J)
paths in cyclotrons, 6: 378
photodisintegration of nuclei by emission and reabsorption, 6: 3408(J)
plural and multiple, theory, 6: 3656(J)
plural production by high-energy nuclear collisions, solution of equations in cascade theories, 6: 5651(J)
potentials and p-p scattering, 6: 2519(J)
production, 6: 1756
production, Fermi's theory on, 6: 3028(J)
production, multiplicity of, 6: 1513
production, theoretical model for, 6: 1756
production and capture by H and D, 6: 3027(J)
production as a function of atomic number, 6: 917
production by cosmic particles in nuclear emulsions, 6: 259(J)
production by nucleon-nucleon collisions, 6: 1301(J)
production by proton-antiproton annihilation, 6: 3039(J)
production by proton-antiproton annihilation, cross sections for, 6: 2457(J)
production by proton-proton collisions, 6: 611(J)
production from deuterium by $\gamma$ rays, 6: 4168(J)
production in high energy collisions, 6: 3597(J), 5002(J)
production in nuclear collisions, 6: 4165(J)
production of neutral, by $\gamma$ rays, 6: 4172(J)
properties, review, 6: 977(J)
pseudoscalar coupling of, equivalence theorems for, 6: 5146
pseudoscalar theory of, exchange magnetic moment in, 6: 4605(J)
reactions in deuterium, 6: 4173(J)
scattering and residual range in nuclear emulsions, 6: 391(J)
scattering by nucleons, 6: 1039(J), 3026, 3027(J), 4173(J)
scattering by nucleons, according to classical treatment of charge-symmetric pseudoscalar field, 6: 5649
scattering by nucleons, theory of effective range for P state, 6: 6140(J)
scattering in gas of diffusion cloud chamber, 6: 315, 316
scattering in Pb plates, 6: 978(J)
self energies, 6: 3032(J)
theory, 6: 745(J), 746(J), 1816, 2161
theory and spin-orbit coupling and exchange effects in, 6: 2461(J)
theory of scattering by nuclear particles, 6: 3036(J)
vacuum polarization in interactions with nucleons, 6: 2725(J)

Mesons ($\kappa$)
(See also S particles.)
decay, 6: 1818, 1827(J), 4169(J)
decay, and energy spectrum of $\mu$-meson secondaries, 6: 3037(J)
decay and nuclear interactions of, 6: 3311(J)

Mesons ($\kappa$) (cont'd)
decay in flight in cloud chamber, 6: 4170(J)
decay schemes, 6: 1756
decay schemes, theory, 6: 2449
decay, spin, and nucleon interaction, 6: 4176(J)
detection, 6: 1512
effects on cosmic-ray bursts underground, 6: 4818(J)
effects on $\mu$-meson intensity underground, 6: 4534(J)
formation in proton-induced showers, 6: 5173(J)
identity with V particle, and review of properties, 6: 5850(J)
mass, 6: 1818, 1827(J), 4169(J)
production in nucleon-nucleon collision as function of nucleon energy, coupling to nucleon in, 6: 6136(J)
tracks of possible, in nuclear emulsions, 6: 4817(J)

Mesons ($\mu$)
absorption by nucleus, 6: 3106
burst production by, at sea level, 6: 4175(J)
capture in heavy elements, 6: 4581(R), 6143(J)
capture in Pb and Ca, calculated from nuclear shell structure, 6: 6142(J)
capture in nuclear emulsions, beta decay and slow electrons associated with, 6: 2452(J)
decay, 6: 1270(J), 1821(R), 2451(J)
decay, relation to beta decay, 6: 1481
disintegration, continuous $\gamma$ spectra in, 6: 1300(J)
disintegration electrons from, energy, 6: 1298(J), 4909(J)
energy loss of fast, by pair production, 6: 4905(J)
Fermi-type interactions, 6: 4923(J), 4999(J)
Fermi-type interactions and selection rules, 6: 5005(J)
half lives in C and S, 6: 5453
intensity of underground, $\kappa$-meson influence on, 6: 4534(J)
interactions in underground cosmic rays, 6: 4819(J)
interactions responsible for decay into an electron and two neutrinos, 6: 4610(J)
ionization in O by, 6: 1824(J)
ionization loss, 6: 5503
K-capture by nuclei, 6: 4904(J)
magnetic moment, cosmic-ray evidence for, 6: 4900(J)
mass, relative to $\pi$, 6: 1289(J)
neutron production by capture in Ca, 6: 4908(J)
neutron production by capture in C, Pb, and Mg, 6: 4174(J)
nuclear and electromagnetic interactions, 6: 2684
nuclear interactions, 6: 3031(J)
nuclear reactions, cross sections, 6: 5129(J)
nucleon capture with electron emission, 6: 5169(J)
positron spectra from decay, 6: 3367, 3368
production by $\pi$ meson decay, 6: 3025(J)
production by underground cosmic radiation, 6: 2683
production of one prong stars by, 6: 3368
range distribution, 6: 1897(L)
range-energy relation of fast, in rock, 6: 4898(J)
response of anthracene crystals to, 6: 3010(J)
rest mass and mean lifetime, 6: 1297(J)
scattering by nuclei, 6: 1818
short-track, from $\pi$-meson decay, 6: 4911(J)
specific ionization, with momentum increase, 6: 4537(J)
star formation, 6: 322
stopping in photographic emulsions, 6: 2726(J)
theory of pairs of, and nuclear phenomena, 6: 3825
track endings in photographic emulsions, 6: 3368
uranium fission induced by, 6: 1860

Mesons ($\mu^-$)
beta decay, 6: 3034(J)
capture, radiative transitions associated with, 6: 3015(R)
electron-emission capture in Cu and Sn, 6: 4166(J)
half lives, 6: 5174(J)
interaction with U nuclei, 6: 6670
production in cyclotrons, and behavior in nuclear emulsions, 6: 6671
stopping in nuclear emulsions, 6: 322

Mesons ($\mu^0$)
from decay of $\pi^0$ mesons, possibility, 6: 3034(J)

Mesons ($\mu^+$)
detection, with short $\gamma$-ray pulse of synchrotron, 6: 5452(R)
energy dependence of the excess of, 6: 3015(R)
half lives, 6: 5174(J)
lifetime, 6: 2163(J)
range straggle, 6: 320

Mesons($\pi$)
absorption and scattering, 6: 1819
absorption and scattering in nuclear emulsions, 6: 672(J)
absorption by $He^3$, 6: 3014
absorption by nuclei, x-ray emission from, 6: 6426
angular distribution from proton-proton collisions, 6: 669
beta decay, 6: 976(J)

Mesons (π) (cont'd)
from carbon and H by photon reactions, 6: 3033(J), 3649(J)
from carbon and Pb, by proton reactions, 6: 2165(J)
charge-exchange scattering, theory, 6: 326(J)
charge ratio produced by photons on nuclei, Z-dependence of, 6: 3024(J)
charge ratio produced in photon reactions with Be and C, 6: 4596
conversion of charged into neutral, in p and d collisions, 6: 3657(J)
decay, and production of μ mesons, 6: 3025(J)
decay, giving short-track μ mesons, 6: 4911(J)
decay, photon-emitting, 6: 3018(J)
decay, soft photons accompanying, 6: 2164(J)
decay, selection rules for, 6: 318
decay, theory of, 6: 2455(J)
decay probabilities, in relation to decay-particle range in emulsion, 6: 3375(J)
decay products of $V^0$ particles, 6: 2110(J)
decay schemes, 6: 655
description by renormalizable field theory, 6: 4178(J)
detection and measurement, 6: 2107
detection and measurement, instrument for, 6: 6622(R)
detection and measurement in Ilford G5 emulsion, 6: 2721
from deuterium, by γ reactions, 6: 2727(J), 3654(J)
from deuterium, by proton reactions, 6: 2458(J)
from deuterium and $H_2$, by photon reactions, calculations, 6: 6134
elastic scattering by C, second-order perturbation treatment, 6: 5848(J)
electromagnetic interference effects in charged π-p scattering, 6: 1514
electromagnetic properties, 6: 2741(J)
formation, 6: 1512
formation by γ reactions, phenomenological analysis, 6: 4901(J)
formation by proton or neutron reactions, 6: 5454(R)
formation, decay schemes, and scattering, 6: 1818
formation in d(p,πt) reaction, 6: 4084(R)
from helium and H by photon reactions, 6: 324
from hydrogen and D by photon reactions, 6: 671
interactions of fast, in nuclear emulsions, 6: 3076
interactions of fast, with nuclei, 6: 1826
interactions of high-energy cosmic, in C, Pb, and paraffin, 6: 5405
interactions with C nuclei, 6: 1823(J)
interactions with π mesons, possibility of obtaining experimental information about, 6: 5654(J)
interactions with nucleons, charge-independence hypothesis in, 6: 2723(J)
interactions with nucleons, theory, 6: 6430(J)
ionization loss by relativistic, 6: 3022(J)
mass, from theory of p-n and p-p interactions, 6: 1894(J)
mass, relative to μ, 6: 1289(J)
mass and potential, 6: 1887
photoproduction, 6: 5846
production, and tests for charge independence, 6: 4171(J)
production, theory, 6: 3386(R)
production at relativistic nucleon energies, 6: 1820
production by high-energy nucleon collision, theory, 6: 3655(J)
production by neutrons on protons, by protons on protons, by protons on C, by deuterons on C, 6: 1821(R)
production in exterior proton beam of Berkeley cyclotron, 6: 2721
production in nuclear collisions, tests of charge independence in, 6: 2465
production in nucleon-nucleon collision as function of nucleon energy, coupling to nucleon in, 6: 6136(J)
production of charged, by γ rays, 6: 3029(J)
production of charged, by photons on surface nucleons of nuclei, 6: 6141(J)
production of charged, from proton bombardment of H, D, and He, 6: 6626
properties, review, 6: 1822(J)
from protons by neutron reactions, theory, 6: 3372(J)
pseudoscalar, nucleon scattering and photoproduction, 6: 6132
scattering, investigation of isobaric states of nucleons by, 6: 5170(J)
scattering and absorption, optical vs. compound models for, 6: 3859(J)
scattering and absorption, theory, 6: 4178(J)
scattering and absorption by C, 6: 3370(J)
scattering and absorption by nuclei and nucleons, 6: 3386(R)
scattering and reactions with nuclei, theory, 6: 5168(J)
scattering by Al, 6: 6625
scattering by Al, Cu, and Pb, 6: 1821(R)
scattering by C and H, 6: 2448
scattering by deuterons, theory, 6: 3038(J)
scattering by H, phenomenological theory, 6: 3371(J)
scattering by H and He, 6: 315
scattering by $H_2$, angular distribution and phase-shift analysis, 6: 4606(J)
scattering by nucleons, classical theory, 6: 4919
scattering by protons, effect of coulomb forces on, 6: 6133
scattering by protons, strong-coupling theory, 6: 4164(J)
scattering by protons and deuterons, theory, 6: 3650(J)

Mesons (π) (cont'd)
unusual decay, in nuclear emulsions, 6: 4177(J)
Mesons ($\pi^-$)
absorption from K shell of $H^3$, ratio of nonradiative to radiative, 6: 5849(J)
absorption in He, nuclear reactions resulting from, 6: 5404(R)
capture and charge-exchange scattering by H, correlation of, 6: 4607(J)
decay in nuclear emulsions, 6: 327(J)
from deuterium by photon reactions, 6: 321, 323, 1005, 2162
deuteron reactions, formation of γ quanta and $\pi^0$ mesons in, 6: 6429(J)
excitation of nuclei by capture of, 6: 5852(J)
formation by γ reactions in nuclei, 6: 4902(J)
mean lifetime, 6: 5452(R)
nuclear interactions in emulsions, narrow-angle pairs of particles from, 6: 5655(J)
nuclear reactions with $C^{12}$, He, and $O^{16}$, 6: 2194(J)
nuclear reactions with O and N, 6: 2183(J)
nuclear scattering cross sections, 6: 319
production by protons on Al, Be, C, Cu, Pb, Ag, and W, 6: 3825
scattering by H, 6: 316, 3020(J), 3648
Mesons ($\pi^0$)
from beryllium ($Be^9$), $B^{10}$, $B^{11}$, $C^{12}$, $O^{16}$, H, and D by proton reactions, 6: 670
from carbon and other nuclei by proton reactions, 6: 4594
decay schemes and mean lifetime, 6: 5173(J)
detection, with Cherenkov counter, 6: 5847
from deuterium by gamma reactions, 6: 973, 975, 4899
from deuterium by proton reactions, 6: 4897
formation and decay in proton bombardment of C, 6: 1865
gamma spectra from decay of, 6: 362
from hydrogen by γ reactions, 6: 2585
from hydrogen by 340-Mev proton reactions, 6: 5847
parity and coupling of, from n + p = $\pi^0$ + d reaction, 6: 6135(J)
photoproduction and properties, 6: 317
production by γ rays, 6: 3030(J)
production by photon-proton interactions, 6: 6620(R)
yield in proton reactions, atomic-number dependence, 6: 4597
Mesons ($\pi^+$)
attenuation in Pb, 6: 6427
attenuation of 50-Mev in Be, C, Al, Cu, and Pb, 6: 4593
from deuterium by proton reactions, 6: 4897
formation by γ reactions in nuclei, 6: 4902(J)
formation in p-p collisions, phenomenological analysis of angular dependence, 6: 4901(J)
from hydrogen by proton reactions, 6: 2450
from hydrogen by proton reactions, angular distribution, 6: 4595
from hydrogen by proton reactions, cross sections, 6: 4592, 4926
interactions in nuclear emulsions, 6: 2721
mean life, 6: 4167(J)
production by proton collision, theory, 6: 6428(J)
production by protons on Al, Be, C, Cu, Pb, Ag, and W, 6: 3825
reactions with deuterons, 6: 328(J), 329(J)
scattering by C, 6: 4593
scattering by H, angular distribution, 6: 4591
scattering by He, 6: 1817
spin, 6: 3648
total cross sections in H, 6: 4895
Mesons (τ)
decay, 6: 4599(J)
decay in flight in cloud chamber, 6: 4170(J)
decay schemes and mass, 6: 1818
detection, 6: 1512
interaction with V particles, 6: 4599(J)
production, 6: 4599(J)
production, interactions responsible for, 6: 3143(J)
properties, review, 6: 5850(J)
Mesons (ζ)
in cosmic showers, search for, 6: 4896
Metabolism
(See also appropriate subheadings under specific materials and organisms; see also Plant metabolism.)
in bacteria, as studied by ethanol synthesis in Pseudomonas lindneri, 6: 1619(J)
of carbohydrates, effects of spleen homogenates on, 6: 5550(R)
of cholesterol in rabbits, effects of inositol and octadecyl alcohol on, 6: 3482
effects of growth and body size on fixed-C turnover, tracer studies, 6: 5037
effects of radiation on, as measured by N balance following x irradiation, 6: 5265
effects of radiation on, in normal and hibernating squirrels, 6: 5550(R)
effects of radiation on nucleic acid synthesis by chick embryos, 6: 4694(R)

Metabolism (cont'd)
effects of radiation on weight changes and water consumption of rats, 6: 5010
effects of x radiation on, 6: 510(R)
endogenous respiration rate as affected by oxidation of exogenous substrates in plant cells, 6: 3941
enzymatic reaction mechanisms affecting, 6: 5982
in leukocytes, in health and leukemia, 6: 4344, 4682
of lipoproteins, effects of radiation on, 6: 38
mathematical treatment of tracer experiments on, 6: 5039(J)
by mitochondria in neoplastic and normal tissues, diphosphopyridine nucleotide requirements for, 6: 6239
of nucleic acids, turnover rate studies, 6: 2288
of nucleic acids in rats, effect of diet and starvation on, 6: 6292
of phosphorus in bone marrow and spleen, 6: 2568
radioautography techniques in studies on, 6: 5957(J)
stripping-film techniques in studies on, 6: 5957(J)
Metabolism cages
combined with hood, for small animals for use during $C^{14}$ metabolism experiments, 6: 3201(J)
for rats, design, 6: 4691(R)
Metal borides
preparation and physical properties, 6: 4408(J)
Metal chlorides
solvent extraction with isopropyl ether from HCl solution, 6: 3766
Metal coatings
(Uses, characteristics, and preparation including metal spraying, vacuum vaporization, and chemical deposition; see also Coatings.)
preparation by vacuum evaporation, straight wire heater for, 6: 6019
thickness measurements on cylinders by x-ray-diffraction analysis, 6: 1486
Metal complexes
(See also specific complexes.)
dissociation constants of, determination by cation exchange resins and tracer studies, 6: 5541(R)
formation and chemical stability, theory, 6: 4392
Metal crystals
effects of cold working and recrystallization on, x-ray studies, 6: 6612(R)
recrystallization mechanism, 6: 117
x-ray asterisms from deformed, 6: 1254(J)
Metal foil detectors
efficiency, statistical evaluation, 6: 4867
neutron flux measurement by, 6: 4155(J)
thermal-neutron flux perturbation by, 6: 5178(J)
Metal halides
preparation apparatus for, 6: 1565(P)
Metal hydrides
preparation, 6: 3460(P)
Metal ions
formation, instrument for, 6: 4335(P)
reaction kinetics, 6: 4392
reduction reactions involving, 6: 1992
thermodynamic properties, 6: 4392
Metal–metal oxide systems
(See Cermets.)
Metal powders
(See also specific metal powders.)
extinction effects in, 6: 2675, 5393(J)
sintering, bibliographies, 6: 602
sorption of gases by, effect on metal reactivity, 6: 5759
surface area measurements, 6: 5759
Metal sulfide films
preparation and infrared spectra of, for use as filters with infrared spectrometers, 6: 5239
Metal trichlorides
high-temperature hydrolysis of solid, 6: 1753
Metallic films
(See also headings for foils identified by material; see also Coatings; Metal coatings.)
catalytic effects on reaction between $NH_3$ and $D_2$, 6: 5998(J)
electric conductivity, theory, 6: 239(J)
Hall coefficient and conductivity of Ag films, measurement of, 6: 3290
preparation, 6: 4556
Metallic foils
scattering of charged particles by, 6: 398(J)
Metallurgical Lab., Univ. of Chicago
progress reports, 6: 732(R)
Metallurgical Labs., Dow Chemical Co.
progress reports, 6: 3573(R), 5605(R)
Metallurgical Labs., Sylvania Electric Products Inc.
progress reports, 6: 603(R), 2933(R)
Metallurgy
(See also as subheading under specific materials.)
Metallurgy (cont'd)
bibliography on progress in, 6: 5787(J)
Metals
(See also specific metals; see also Alloys; Metal powders; Porous metals.)
absorption mechanism for charged particles, 6: 3098(J)
activation analysis for N, 6: 6616(J)
bonding to glass, role of surface tension in, 6: 202
cladding, methods and processes for, 6: 2091(J)
coating by vapor deposition, 6: 2941(J)
colorimetric determination with dithizone, 6: 4733
contamination by $I^{131}$, 6: 883
corrosion, polarographic study of, 6: 1450(R)
corrosion, symposium on, 6: 210
corrosion by liquid metals, 6: 5601, 6603
corrosion by liquid metals, method for evaluating test results, 6: 4492
corrosion by $O_2$, mechanism, 6: 3281(J)
corrosion by water, 6: 4776(R)
corrosion by water, effects of temperature on, 6: 6046(J)
corrosion by water, effects of velocity on, 6: 6047(J)
creep, equipment for testing, 6: 192
creep, mechanism of, 6: 1733
creep, theory, 6: 2021
creep properties, correlation by a diffusion analogy, 6: 6076(J)
creep under stress, 6: 3792(J)
crystal structure, theory, 6: 1660
deuteron range-energy relation in, 6: 1032(J)
diffusion, dimensional changes normal to the direction of, 6: 2106
displaced atoms in cyclotron-irradiated, 6: 3104
effects of radiation on, bibliographies, 6: 5694
effects of radiation on diffusion in, 6: 3783
effects of radiation on elastic constants, 6: 6475(J)
elastic constants measured by ultrasonic pulse technique, 6: 2103
electrical conductivity and volume changes on fusion, 6: 5394(J)
electrodeposition, 6: 4724(R)
electrolytic cutting, 6: 1738
electron scattering from point singularities in, theory, 6: 5903(J)
electron scattering in, exchange effects, 6: 3703(J)
electron shell structure in, measured by positron annihilation, 6: 2509(J)
electroplating with Ni and Fe, 6: 2670
embrittlement by H, mechanism of, 6: 3786
fatigue, research programs in England, Sweden, France, and Switzerland on, 6: 1722
fatigue, testing equipment for, 6: 193(J)
fatigue, theory based on grain-size distribution, 6: 6060
fatigue at high temperatures, 6: 877
fatigue properties, statistical nature of, 6: 4488
furnacing and casting, 6: 2384(J)
galling and seizing characteristics, 6: 4793(R)
inductive melting without refractory containers, 6: 2080
interactions with ceramics at high temperatures, 6: 205
intermetallic diffusion, theory, 6: 2925
magnetic properties, theory, 6: 3607(J)
melting and sintering in vacuum, 6: 246(J)
melting in space by support of magnetic fields, 6: 5390(J)
metallographic etching, mechanism of, 6: 3790(R)
metallography with polarized light, 6: 1228
nuclear resonance and electronic structure of transition, 6: 4103(J)
oxidation, cubic law of, 6: 1462
oxidation, theory, 6: 2373
permeability to H, mechanism of, 6: 3786
plastic deformation, theory and bibliography, 6: 4070
purification of low-melting, apparatus for, 6: 3572
recrystallization, 6: 618(R)
scaling behavior, 6: 1731
secondary-electron emission from, under positive-ion bombardment, 6: 2690(J)
self-diffusion, entropies of activation, 6: 6362
self-diffusion, theory and experiment, 6: 5388(R)
separation by distillation of halides, 6: 5311(R)
spectrophotometric determination, 6: 5311(R)
spectrophotometric determination of heavy, as halide complexes, 6: 2585
stacking-fault broadening in x-ray diffraction pattern of cold-worked, 6: 6072(J), 6605
static behavior, stressed beyond yield point, 6: 2676
stationary potential of spontaneous acid dissolution, 6: 4495(J)
stress-strain-time functions of, in simple monotonic tension, 6: 5363
surface area, apparatus for determination, 6: 897
thermal conductivity at high temperatures, measurement, 6: 2652(J), 2680
thermodynamic properties, 6: 1471(R), 4507(R)
vacuum evaporation, 6: 3779
vacuum evaporation, straight wire heater for, 6: 6019

Metals (cont'd)
vapor pressure chart, 6: 1734
welding by resistance method, 6: 181
wettability of group I and VIII, by sodium silicates, 6: 4780
Metals (liquid)
(See also specific metals and alloys.)
corrosive effects on metals, 6: 6603
corrosive effects on metals, method for evaluating test results, 6: 4492
diffusion and mass transfer by, 6: 6607
diffusion coefficients, 6: 2909(R)
distillation apparatus for, 6: 5601
handbooks, 6: 6604
for heat transfer, bibliography, 6: 5787(J)
heat transfer characteristics, effects of wetting on, 6: 186(R), 6067(R)
heat transfer of, by forced convection in thermal entrance regions, 6: 4482
heat transfer to and from, in annuli and circular tubes, 6: 1198
mass transfer in systems of, 6: 2361(R), 2362(R), 2909(R)
sampler and extraction apparatus for, 6: 5376
self-diffusion, theory, 6: 4727
thermal conductivity, measurement, 6: 1444(J)
valve for stopping flow of, 6: 4477
vorticity heat transfer in, 6: 3560
Metals Corrosion Lab., Bureau of Mines
progress reports, 6: 2920(R), 2921(R), 4777(R)
Metals Research Lab., Carnegie Inst. of Tech.
progress reports, 6: 599(R), 601(R), 1473(R), 2667(R), 5108(R), 5109(R), 5397(R)
Metamict minerals
age estimation from differential thermal analysis and $\alpha$-activity measurements, 6: 6359(J)
storage of radiation energy in, 6: 3990(J)
Metaphosphates
(See also Phosphates.)
toxicity, hydrolysis, tissue distribution and excretion, in rats, 6: 2833
Meteorites
alpha radioactivity of Lowics, Poland, 6: 6483(J)
radioactivity in, distribution, 6: 2789(J)
ratio of O isotopes in, 6: 1744(J)
Meteorological instruments
(See also specific instruments.)
aerovanes, wind tunnel tests on, 6: 3378
for analyzing energy spectrum of turbulence electronically, 6: 3838(R)
design, for study on turbulence and diffusion of particulate matter in lower layers of the atmosphere, 6: 1516(R), 1517(R), 1518(R), 1519(R)
fast-response bi-vane, design and performance, 6: 3041(R)
Meteorology
(See also as subheading under specific sites, installations, and geographic areas; see also subheadings under phenomena affected; see also Atmosphere; Stack disposal.)
atmospheric diffusion from a point source, 6: 979
collection of water droplets in clouds and radiation fogs, 6: 4528(J)
diffusion rate of matter in lower atmosphere, relationship between meteorological quantities and, 6: 3827(R)
forecasting of micrometeorological variables, and control of Brookhaven reactor, 6: 5656(J)
intensities of atmospheric turbulence, 6: 331(J)
oil-fog dispersion from 100-m chimney at BNL, 6: 5853(J)
turbulence and diffusion of particulate matter in atmosphere, 6: 676(R), 3041(R)
turbulence and diffusion of particulate matter in lower layers of atmosphere, measurements and instrumentation for wind and air temperature measurements, 6: 6673(R)
vertical wind gradient apparatus, 6: 938
wind velocity and gusts, variation with height, 6: 6431
Meters
(See specific meters.)
Methane
adsorption isotherms on graphite and laminar compounds, 6: 3247(J)
chemical determination, 6: 3212(R)
halo derivatives, quadrupole spectra and couplings of $Cl^{35}$ in, 6: 1308(J)
ionization potential by mass spectrography, 6: 291(J)
molecular orbital calculations for, 6: 2166(R)
molecular vibration of, and of its deuterated forms, 6: 137(J)
neutron scattering by, 6: 5215
reactions with I activated by neutron capture, 6: 6566(J)
separation from CO and $CO_2$, 6: 6526(R)
thermal capacity of, adsorbed on $TiO_2$, 6: 868
thermal conductivity at low pressure, 6: 6591(J)
thermodynamic equilibrium with Mo, Mo carbides, and $H_2$, 6: 6615(J)
Methane, bromo-
bond rupture in, following isomeric transition of $Br^{80}$, 6: 3382
Methane, bromo- (cont'd)
molecular parameters and rotational constants of partially deuterated, 6: 5341(J)
synthesis of labeled, 6: 4280
Methane, bromochlorodifluoro-
infrared spectra, 6: 2898(J)
Methane, bromodifluoro-
infrared spectra, 6: 2898(J)
Methane, bromotrifluoro-
infrared spectra, 6: 2323(J), 2898(J), 4756(J)
microwave spectra and molecular structure, 6: 2345(R), 3986(J)
preparation and properties, 6: 2323(J)
Methane, chloro-
molecular parameters and rotational constants of partially deuterated, 6: 5341(J)
Methane, chlorotrifluoro-
preparation, properties, and infrared spectrum, 6: 2323(J)
Methane, diazodiphenyl-
reaction with acetic acid in ethanol, kinetics and hydrogen isotope effects, 6: 5045(J)
Methane, dibromodifluoro-
infrared spectra, 6: 2898(J)
Methane, dichloro- (labeled)
microwave spectra, structure, and Cl nuclear quadrupole coupling constants, 6: 6446(J)
Methane, dichlorodifluoro-
ionization-type detector for, 6: 763(R), 4693(R)
Methane, difluoro-
microwave spectra of asymmetric rotor, 6: 4021
Stark effect measurements of, 6: 4021
Methane, fluoro-
dielectric properties of compressed, 6: 4914(J)
thermodynamic properties, 6: 3989(J)
virial coefficients, 6: 128(J)
Methane, iodo-
molecular parameters and rotational constants of partially deuterated, 6: 5341
synthesis of $C^{14}$-labeled, 6: 4023(J)
Methane–oxygen mixtures
combustion, effects of ionizing radiation on, 6: 2356(R)
Methane, trichloro-
(See Chloroform.)
Methane, trifluoroiodo-
infrared spectra, 6: 2323(J), 2898(J), 4756(J)
microwave spectra and molecular structure, 6: 2345(R), 3986(J)
preparation and properties, 6: 2323(J)
Methane, triphenyl- derivatives
spectrophotometric studies in liquid $SO_2$, 6: 5350
Methanesulfonic acid
as solvent in organic polarography, 6: 2598
Methanol
adsorption on C, 6: 1425(R)
infrared absorption spectra of solutions in $CCl_4$ in the second harmonic region, 6: 2347
proton resonances in, effects of temperature on, 6: 1671(J)
separation from HCHO and HCOOH, 6: 3211(R), 3212(R), 6526(R)
Methanol–water systems
determination of activities, 6: 6374
Methionine
biosynthesis of $S^{35}$-labeled, by E. coli, 6: 2349(J)
determination by nitroprusside reaction, 6: 812
metabolism in the biosynthesis of formates, 6: 2837
metabolism in thiomethyladenosine biosynthesis by yeasts, 6: 5532, 5533
protein uptake by, in rat sarcoma cells after x irradiation, 6: 4704(J)
in synthesis of adenine thiomethylriboside in yeasts, 6: 1072
synthesis of $S^{35}$-labeled, 6: 4453(J)
Methyl radicals
reactions with $H_2$ and $D_2$, 6: 3529(J)
Methylamine
appearance potentials and bond energies, 6: 4864(J)
protective action against x radiation, 6: 1385(J)
Methylamine, bis(2-chloroethyl)-
effect on mobility and viscosity of desoxyribonucleic acid, 6: 6326(J)
radiomimetic effect on desoxyribonucleic acid, 6: 2627(J)
Methylene blue
effects of radiation on, in aqueous and glycerin solutions, 6: 3174(J)
effects on concentration of K in erythrocytes, 6: 791
Metrazole
synthesis of $C^{14}$-labeled, from cyclohexanone, 6: 2054
Mice
ages of embryos of man and, table and graph for estimating equivalent, 6: 3149
effects of air blasts on, 6: 12

Mice (cont'd)
effects of x radiation on, 6: 45
effects of x radiation on, and lethal dosage determinations, 6: 6498
pathological lesions in, following single dose of total-body x radiation, 6: 2258
quarters for, criteria for air conditioning, 6: 1373
radiosensitivity, effects of injected ethanol on, 6: 3500
a transmissible disease in, characterized by anemia, leukopenia, and erythropoietic splenomegaly, 6: 1071
x-ray-induced mutations in, 6: 5017(J)
x-ray lethal dosage determinations for, 6: 3162(J)
Michigan Univ.
(See also Engineering Research Inst., Univ. of Mich.)
progress report on universal serologic reaction following irradiation, 6: 6496(R)
Microörganisms
(See also Bacteria; Yeast; etc.)
effects of radiation on, 6: 916(R), 2253(R)
lethality of $\gamma$ rays on, 6: 2356(R), 6495
Microscopes
(See also Electron microscopes.)
for determining concentration of submicroscopic particles in air, design of portable, 6: 4347(J)
goniometer for, design, 6: 2142
optical, design, 6: 3818(R)
Microscopy
(See also Electron microscopy; Photomicrography; X-ray microscopy.)
preparation of tissue sections for, by freeze-drying before embedding, 6: 5928
Microstructure
(See as subheading under specific materials; see Grain structure.)
Microtomes
for cutting sections for electron microscopy, 6: 4700(R)
Microwave oscillators
design, 6: 3380(R)
Microwave spectra
bibliographies, 6: 2345(R)
tables of, for paramagnetic salts, 6: 3383(R)
in wavelength range 2 to 3 mm, measurement and tables of, 6: 3379(R)
Zeeman effect measurements on, apparatus and techniques for, 6: 5854
Microwave spectrometers
design, 6: 2345(R)
molecular-beam modulation, design, 6: 3379(R)
Microwave spectroscopy
(See also subheading microwave spectra under specific materials.), 6: 1750(R)
equipment for, 6: 2895(R)
progress reports on, at Duke Univ., 6: 5855(R)
in studies of OCS, 6: 340(J)
of water and methanol, 6: 4085(R)
Microwaves
absorption, 6: 1782(R)
absorption, beam system for reduction of Doppler broadening in, 6: 2733(J
completeness relations for loss-free junctions, 6: 3381
detection and measurement, 6: 1750(R)
determination of collision probability for slow electrons in gases using, 6: 1490
generation, 6: 1750(R), 4085(R)
ocular damage caused by, 6: 3911
resonant behavior of spheroidal cavity system in region of, 6: 253
stable reference system for, design, 6: 5430
transmission, 6: 2345(R)
transmission, group and energy velocities in periodic waveguides for, 6: 2731
transmission, theory of semicircular waveguide for, 6: 2732
transmission through loss-free cavities excited through holes, 6: 4611
tubes for generation of, design, 6: 1782(R)
Milk
chemical composition, vitamins and enzyme activity in, effects of radiation on, 6: 2569(R)
formation, tracer studies in, 6: 3896(R)
formation in dairy cow, tracer studies of role of acetate in, 6: 4385
sterilization by radiation, 6: 2569, 4353(R)
Mineral dressing
(See also subheadings for specific processes under specific minerals and ores.)
tracer techniques in, review and bibliography on, 6: 5613
Minerals
(See also specific minerals; see also Radioactive minerals.)
activation determination of microquantities of U in, 6: 5741
adsorptive properties, 6: 4497(R)
age estimations by He content, 6: 3570(J)
age estimations by radioactivity methods, 6: 5371(J)
Minerals (cont'd)
behavior in flotation, 6: 4497(R)
beneficiation, 6: 251(R)
colorimetric analysis for Th, 6: 1401
electrostatic separation of, bibliography on, 6: 1423
flotation, 6: 5368(R)
flotation, using radioactive hexyl mercaptan, 6: 4497(R)
flotation studies, 6: 251(R), 2073(R)
grinding, equipment for, 6: 4497(R)
helium content of, effect of $\alpha$-ionization damage to crystal structure on, 6: 3570(J)
metamict state of, studies in, 6: 3571(J)
radioactivation determination of U in, 6: 5737
radioactive decay rate and age estimations of, 6: 425(J)
radioactivity induced in natural, application to beneficiation, 6: 4497(R)
radioactivity of, measured, 6: 4497(R)
separation of grains, apparatus for, 6: 6597
uranium determination in, by fluorimetric analysis, 6: 1404(J)
Minnesota Mining and Manufacturing Co.
progress reports, 6: 1701(R), 2322(R), 5747(R)
Minnesota Univ.
progress reports, 6: 891(R), 5765(R)
Missouri
uranium distribution in, 6: 1728(J)
Mitochondria
aldehyde-oxidizing enzymes in, of animal tissue, 6: 5980
of neoplastic and normal tissues, diphosphopyridine nucleotide requirements, 6: 6239
pyruvate oxidation in suspensions of, 6: 760
Mitosis
(See also appropriate subheadings under materials, radiations, etc., causing mitosis; see also Chromosomes; Genetics.)
chromosomal changes during, in bacteria, 6: 5536
effects of Be on, Mg-ion inhibition of, 6: 5034(J)
effects of radiation on, 6: 1949
effects of x and $\beta$ radiation on, in grasshopper neuroblasts, 6: 2249
mechanics of, and effects of colchicine on, 6: 502(R)
Mohave Desert (Calif.)
airborne radioactivity survey, 6: 6055
Molds
(See also Fungi.)
effects of radiation on, 6: 916(R)
sterilization by electron irradiation of cotton seed infected by, 6: 2815(J)
Molecular beams
(See also Ion beams.)
focusing by magnetic field, theory and apparatus for, 6: 1335(J)
system of, for reduction of Doppler broadening of microwave absorption lines, 6: 2733(J)
Molecular properties
(See also headings for specific properties; also as subheading under specific materials.)
determination for $HC^{13}N$, 6: 4280
force constants, use of isotopic molecules in determining, 6: 3043(J)
Molecular rearrangements
Wagner, tracer study with $C^{14}$, 6: 4398
Molecular structure
(See also as subheading under specific materials.)
effects of radiation on, bibliography, 6: 5694
electron distribution in, effects of $F^{19}$ nuclear magnetic shielding and substituents on, 6: 6564(J)
interpretation and theory of, 6: 1302(R)
microwave determination, 6: 3379(R)
relation to nuclear relaxation time in hydrocarbons, 6: 1418(J)
sum rules for frequencies of isotopic molecules, 6: 1417(J)
theory of, 6: 138(J)
Molecular weights
determination for pneumococcus, insulin, and amalase, by ionizing radiations, 6: 3895(R)
Molecules
(See also specific molecules, e.g., Hydrogen molecules.)
asymmetric, centrifugal distortion in, 6: 1521
asymmetric rotor, effect of centrifugal distortion on rotational energy levels of, 6: 4913
asymmetric rotor, rotational line strength in, 6: 5176
coupling of electron and nuclear motions in, theory, 6: 3454(J)
electron energy levels, theory, 6: 6674(R)
interactions between nuclear spins in, 6: 2172(J)
magnetic properties, theory using atomic orbitals, 6: 6674(R)
neutron scattering cross sections, theory, 6: 5215
theory of, 6: 2166(R)
Molybdenum
coating, fabrication, mechanical properties, and production of, review of current status, 6: 1466

**Molybdenum (cont'd)**
colorimetric determination in Ti, 6: 2312(J), 3523
corrosion by Bi–Pb eutectic, 6: 901
corrosion by liquid Bi, 6: 900
determination in U-Mo alloys, 6: 544
dissolution rate in $HNO_3$ at 25°C, 6: 6039(J)
effects of impurities on the band ductility of cast, 6: 1740(J)
effects of radiation on properties, 6: 6705(R)
electric conductivity of, effect of elastic deformation on, 6: 241(J)
electric resistance and magnetoresistance at low temperatures, 6: 5622(J)
gamma absorption coefficients, experimental and theoretical, 6: 5217(J)
gamma reactions (γ,n) at 320 and 160 Mev, 6: 1538
gravimetric determination in Ti and Ti alloys, 6: 3523
lattice parameter of, influence of C on, 6: 2095(J)
magnetic structure of, from neutron-diffraction studies, 6: 3674
magnetic susceptibility, 6: 5116
mechanical properties at high temperatures, 6: 2930
photometric determination of traces, 6: 5318(J)
physical properties, bibliography and literature review, 6: 4075
preferred orientation of arc-cast, 6: 2096(J)
properties, effects of working on, 6: 3292(J)
properties and powder metallurgy, 6: 2669
proton reactions (p,n), 6: 1859
proton reactions (p,n), thick-target yield in, 6: 1535
radiometric determination, 6: 2018(J)
separation from fission products, 6: 1424(R)
solubility in liquid Pb and Bi, 6: 5602
stress-rupture of, by liquid Pb and Bi, 6: 5601, 5602
thermal conductivity over temperature range 1000 to 2100°F, 6: 2105
thermodynamic equilibrium with Mo carbides, $H_2$, and $CH_4$, 6: 6615(J)
thermoelectric power of, effect of cold work and annealing on, 6: 1741(J)
vacuum fusion analysis for $O_2$, $N_2$, and $H_2$ in, 6: 3254(J)
vapor-pressure between 2151 and 2462°K, 6: 88
volumetric determination, 6: 1402(J)
welding, 6: 227
x-ray spectra, 6: 97(J)

**Molybdenum alloys**
properties and metallurgy, 6: 2669

**Molybdenum–aluminum alloys**
constitution diagrams, 6: 2300
corrosion by fuming $HNO_3$, 6: 2300
oxidation, strength, microstructure, and thermal conductivity, 6: 2300

**Molybdenum–aluminum compounds (intermetallic)**
x-ray-diffraction analysis, 6: 199

**Molybdenum–aluminum–titanium alloys**
mechanical properties and transformation temperatures, 6: 5606(R)
preparation by melting and forging, 6: 4780(R)

**Molybdenum borides**
preparation and physical properties, 6: 4408(J)

**Molybdenum carbides**
crystal structure, 6: 2316(J)
thermodynamic equilibrium with Mo, $H_2$, and $CH_4$, 6: 6615(J)

**Molybdenum–chromium–cobalt alloys**
phase studies, 6: 3785

**Molybdenum–chromium–cobalt–nickel alloys**
phase studies, 6: 3785

**Molybdenum–chromium–nickel alloys**
phase studies, 6: 3785

**Molybdenum–chromium–titanium alloys**
constitution diagrams, 6: 4792(R), 5384(R)
heat treatment, 6: 5384(R)
phase studies, 6: 5384(R)

**Molybdenum coatings**
vapor deposition on Ti and Ti alloys, 6: 4787

**Molybdenum–cobalt–nickel alloys**
phase studies, 6: 3785

**Molybdenum complexes**
with 2-methyl-8-quinolinol, stability of, 6: 1141(J)

**Molybdenum compounds**
catalytic effects on hydrolysis of organic phosphates, 6: 5987

**Molybdenum crucibles**
fabrication using Mo powder in starch solution, 6: 5596

**Molybdenum fluorides**
molecular structure of, from infrared and Raman spectra, 6: 3132(J)

**Molybdenum isotopes**
decay schemes, 6: 1907
hyperfine structure, relative isotopic shift in, 6: 6442(J)
Szilard-Chalmers concentration, 6: 4017(J)
yields in $U^{235}$ fission, 6: 1327(J)

**Molybdenum isotopes $Mo^{92}$**
alpha reactions (α,2n), 6: 5235(J)

**Molybdenum isotopes $Mo^{93}$**
radiations from, coincidence study of, 6: 2159(J)

**Molybdenum isotopes $Mo^{94}$**
alpha reactions (α,4n), 6: 5235(J)
mass, 6: 3054

**Molybdenum isotopes $Mo^{95}$**
decay schemes, 6: 3724(J)
energy levels, spins of, 6: 5511(J)

**Molybdenum isotopes $Mo^{96}$**
energy level diagram, 6: 419(J)

**Molybdenum isotopes $Mo^{97}$**
binding energy of, calculation, 6: 333(J)

**Molybdenum isotopes $Mo^{98}$**
mass, 6: 3055

**Molybdenum isotopes $Mo^{99}$**
yield from proton and neutron fission of U, 6: 3845
yield from proton-induced fission of U, 6: 1856, 3406

**Molybdenum–manganese–titanium alloys**
analysis, 6: 5384(R)
constitution diagrams, 6: 4792(R)

**Molybdenum oxide complexes**
with alkali fluorides, energy of formation of, 6: 2306(J)

**Molybdenum powders**
adsorption of gases on, and degasification, 6: 5349(R)
oxidation, and reduction of surface oxide on, 6: 5349(R)

**Molybdenum single crystals**
crystal structure and plastic deformation, 6: 1736(R)

**Molybdenum sulfides**
bonding of, to surfaces to form lubricating film, 6: 2599

**Molybdenum–tantalum alloys**
phase studies, 6: 1256(J)

**Molybdenum–titanium alloys**
phase studies, 6: 5384(R)
time-temperature-transformation characteristics of, 6: 2100(J)

**Molybdenum–uranium alloys**
chemical analysis, 6: 544

**Molybdenum–zirconium alloys**
constitution diagrams, 6: 591(R), 4505(R)
crystal structure, 6: 249(J)

**Monazites**
(See also Thorium ores; Uranium ores.)
analysis for Th, tracer study, 6: 5989
chromatographic analysis, 6: 2875(J)
conductometric analysis for Th, 6: 5316
fluorimetric analysis for U, 6: 1136
gravimetric analysis with benzoic acid, 6: 2017(J)
separation of La, Ce, and Th from, 6: 5089(J)
separation of Th from, with $NH_3$, 6: 3544(J)
separation of Th from, with vanillic acid, 6: 5053(J)
separation of Th from cerite earths of, with cinnamic acid, 6: 5052(J)
spectrophotometric analysis for Th, 6: 5738

**Monomolecular films**
preparation and properties, symposium on, 6: 5114

**Montana**
reconnaissance for uraniferous coal, lignite, and carbonaceous shale in, 6: 6599

**Monte Carlo method**
(See also Mathematics.)
applied to cascade, electron, and photon showers in Pb, 6: 3816(J)
based on the properties of algebraic numbers and applied to evaluation of definite integrals, 6: 2992
for estimating solutions to integral equations, 6: 4140, 4141, 4142

**Montmorillonite**
waste processing by ion exchange using, 6: 2368
x-ray diffraction patterns, 6: 2368

**Morin**
ion-exchange separation and purification, 6: 1970(J)

**Morocco**
exploration of uraniferous phosphate deposits in, 6: 1461(J)
pitchblende and tungsten minerals in, identification of, 6: 1460(J)
uranium occurrence in, 6: 2658(J), 2659(J)

**Morphine**
synthesis of labeled, 6: 1180(J)

**Morphine sulfates**
radiosensitivity effects, 6: 1963(J)

**Morphology**
(See as subheading under specific organisms.)

**Morrison formation**
6: 5776
geology, 6: 1458

**Mortars**
(See also Cements.)
properties, 6: 1437

**Motion-picture films**
on agricultural tracer studies with $P^{32}$, $Co^{60}$, and $Ca^{45}$, 6: 5294(J)

Motion-picture films (cont'd)
on fundamentals of radioactivity, 6: 5512(J)
on properties of radiation, 6: 5458(J)
on radioactivity measurement, practical procedures for, 6: 5443(J)
on radiological safety in handling of radioisotopes, 6: 5281(J)
on tracer methodology, 6: 2840(J)
on tracer studies in metallurgy, chemistry, biochemistry, and plant physiology, 6: 5357(J)
Mound Lab.
history, personnel, and equipment, 6: 4340(J)
progress reports, 6: 960(R), 1278(R)
progress reports on homogeneous reactor experiment, 6: 3070(R)
progress reports on instrumentation, 6: 4145(R), 4852(R), 6864(R)
progress reports on U salt research, 6: 3583(R)
Mouth
effects of radiation on tissues of, 6: 2254, 2819(J)
pathological effects of x radiation received during dental examination, 6: 5950
Mucoproteins
concentration of, from alkaline solution of intestine, 6: 4352(R)
Mucosa
oxygen consumption, effects of x radiation on, 6: 3909(J)
Mullite
thermal conductivity, 6: 204
thermal conductivity, measurement by ellipsoid envelope method, 6: 2918
Multiple sclerosis
radiotherapy of, indirect irradiation in, 6: 66(J)
Multiplication factor
(See also as subheading under reactors.)
calculation, 6: 1000
Muscles
effects of x irradiation on glycogenesis in guinea pig, 6: 3905(J)
electrolyte retention in, following x irradiation, 6: 1077
Mutants
of bacteria, produced by x irradiation, 6: 6258(J)
Mutations
(See also appropriate subheadings under specific organisms.)
dose-frequency curve for radioinduced, 6: 777(J)
effects of oxygen tension and chemicals on x-ray-sensitivity of, 6: 5025(J)
as explanation for inheritance of reduced vigor, 6: 140
induced by radiation from $P^{32}$, in Drosophila, 6: 5939
lethal, induced by ionizing radiation in bacteria, 6: 6499(J)
in plants from irradiated seeds, 6: 32
produced by indirect effects of x radiation in Drosophila, 6: 6266(J)
radioinduced, frequency in Aspergillus Terreus, 6: 4368(J)
radioinduced in animals, review, 6: 5955(J)
radioinduced in E. coli, effects of streptomycin on, 6: 4366(J)
radioinduced in fungi, 6: 1085
recessive lethal, following x irradiation of female Drosophila, 6: 5263
spontaneous and radioinduced, in barley and wheat seedlings, 6: 2262(J)
theory of, 6: 6
in wheat, induced by exposure of seed to radiation from an atomic bomb explosion, 6: 6265(J)
x-ray-induced, in Drosophila, 6: 8, 770(J)
x-ray-induced, in mice, 6: 5017(J)
x-ray-induced, origin of, 6: 769(J)
Myristic acid
incorporation into phospholipides by rats, 6: 798(J)

## N

Nagasaki
biological, sociological, and psychological effects of atomic explosion at, 6: 5719(J)
Naphthalene
absorption spectra and fluorescence, 6: 1695
deuterated, mass spectra of, 6: 3979(J)
luminescence of crystals and xylene solutions, γ-irradiated, 6: 4750(J)
1,4-Naphthoquinone, 2-methyl-
effects on concentration of K in erythrocytes, 6: 791
synthesis of $C^{14}$-labeled, 6: 4023(J), 5761(J)
1-Naphthylamine, N-phenyl-
fluorescence of, α- or γ-induced, 6: 653(R)
National Bureau of Standards
progress reports, 6: 1279(R), 1497(R), 3818(R)
progress reports on basic instrumentation, 6: 3338(R), 5830(R)
National Research Corp.
progress reports, 6: 223(R)
Naval Medical Research Inst., Bethesda
progress reports, 6: 2838(R)
Naval Research Lab.
progress reports on matrix telemetering system, 6: 2972(R)
Negatrons
(See Beta particles.)
Neodymium
electric conductivity at low temperatures, 6: 5380
heat of combustion, 6: 4524
natural radioactivity, 6: 2528
natural radioactivity, search for with proportional detector, 6: 6720
neutron capture cross sections of, measured by pile-oscillation method, 6: 3426(J)
neutron scattering cross sections, 6: 5399(R)
spectrographic determination in rare earth mixtures, 6: 2308
thermodynamic properties, 6: 560, 840
Zeeman spectra obtained with echelle spectrometer, 6: 6203
Neodymium aluminates
dielectric properties, 6: 2075(J)
Neodymium borides
paramagnetic properties of $NdB_4$, 6: 4993(J)
Neodymium chlorides
absorption spectra, 6: 1628
activity coefficients, conductances, and tranference numbers, 6: 562
activity coefficients of, in aqueous solutions, 6: 558
thermodynamic properties, 6: 560, 839
transference numbers, 6: 563
Neodymium complexes
with ethylenediaminetetraacetic and nitrilotriacetic acids, spectrophotometry of, 6: 2889(J)
magnetic properties of $Nd[Co(CH)_6]$ and $Nd_3[(Ni(CN)_4]_3 7H_2O$, 6: 4013(J)
Neodymium compounds
fluorination with $ClF_3$ and $BrF_3$, 6: 2337(J)
thermodynamic properties, 6: 840
Neodymium ethyl sulfates
specific heat at low temperatures, 6: 3666
specific heat from 1 to 2°K, 6: 6624(R)
Neodymium fluorides
reflection spectra, 6: 2339(J)
Neodymium(III) ions
absorption spectra and transition probabilities for, 6: 3418
Neodymium isotopes
cross sections for formation of, in neutron irradiation of $Nd_2O_3$, 6: 1424(R)
decay schemes, 6: 1907
proton binding energy and shell structure in, 6: 3049(J)
proton reactions, 6: 2184(J)
Neodymium isotopes $Nd^{140}$
gamma and x-ray emission in decay, 6: 4657
Neodymium isotopes $Nd^{142}$
neutron scattering cross sections, 6: 5399(R)
Neodymium isotopes $Nd^{143}$
hyperfine structure in Nd ethyl sulfate and nuclear magnetic moment, 6: 6153(J)
neutron emission, absence of, 6: 4277(J)
Neodymium isotopes $Nd^{144}$
energy levels, 6: 3434
energy levels, from $Pr^{144}$ decay, 6: 5517(J)
neutron scattering cross sections, 6: 5399(R)
Neodymium isotopes $Nd^{145}$
hyperfine structure in Nd ethyl sulfate and nuclear magnetic moment, 6: 6153(J)
Neodymium isotopes $Nd^{147}$
low-energy γ transitions in, 6: 2522
Neodymium oxalates
thermodynamic properties, 6: 560
Neodymium oxide–uranium(IV) oxide systems
phase studies, 6: 3772
Neodymium oxide–uranium(IV-VI) oxide systems
phase studies, 6: 3772
Neodymium oxides
heat content, specific heat, and entropy, 6: 147(J)
heat of formation of $Nd_2O_3$, 6: 4524
reflection spectra, 6: 2339(J)
Neodymium oxyfluorides
reflection spectra, 6: 2339(J)
Neodymium scandates
dielectric properties, 6: 2075(J)
Neodymium silicides
preparation and crystal structure, 6: 2335(J)
Neodymium sulfates
paramagnetic resonance absorption in, 6: 1359(J)
specific heat at low temperatures, 6: 3666
Neon
collision probability for slow electrons in, 6: 1490
deuteron reactions, angular distribution of protons and deuterons from, 6: 6167(J)
diffusion coefficients in, 6: 4565(J)
dynamic characteristics of the plasma in discharges through, 6: 6096(J)

Neon (cont'd)
excitation potentials and range of $\alpha$ particles in, 6: 4238(J)
ionization by $\alpha$ particles, 6: 5639(R)
ionization by $\alpha$ particles, effect of impurities on, 6: 6474
Neon isotopes
distribution along Clusius-Dickel column, 6: 2700(J)
Neon isotopes $Ne^{19}$
mass difference between $F^{19}$ and, 6: 2756(J)
positron spectrum, half life, and $\gamma$ radiation accompanying decay of, 6: 3869(J)
Neon isotopes $Ne^{20}$
binding energy of, calculation, 6: 333(J)
deuteron reactions (d,p), energy of, 6: 2185(J)
energy levels, 6: 3085(J)
energy levels, from proton inelastic scattering, 6: 5495(J)
mass, calculated from nuclear data, 6; 6149
Neon isotopes $Ne^{21}$
spin and parity, 6: 1859, 6167(J)
Neon isotopes $Ne^{22}$
deuteron reactions (d,p), energy of, 6: 2185(J)
Nephrosis
induction by uranyl nitrate, effect of testosterone on, 6: 3510(J)
Neptunium
absence in nature, reason for, 6: 2059(J)
crystal structure, 6: 2689
crystal structure and phase studies of metal, at high temperatures, 6: 6312(J)
crystal structure at elevated temperatures, 6: 4036
crystal structure of metal, 6: 6315(J)
discovery and identification of, lecture on, 6: 1835
heat of reaction with HCl, 6: 2903(J)
oxidation potential, 6: 4034
oxidation-reduction reactions in solution, mechanism, 6: 6529
x rays of, in $U^{237}$ and $Am^{241}$ decay, 6: 4657
Neptunium carbides
identification by x-ray-diffraction study of crystal structure, 6: 5744
Neptunium chlorides
heat of formation, 6: 2903(J)
preparation, 6: 3457(P)
preparation of $NpCl_4$, 6: 4474(J)
Neptunium complexes
with oxalate, composition of Np(V), 6: 4474(J)
Neptunium(III-IV) couples
oxidation potentials in perchloric acid, 6: 4034
Neptunium(V-VI) couples
oxidation potentials in perchloric acid, 6: 4035
Neptunium(III) ions
absorption spectra and transition probabilities for, 6: 3418
Neptunium(V) ions
infrared spectra and atomic structure, 6: 3259
Neptunium(VI) ions
infrared spectra and atomic structure, 6: 3259
Neptunium isotopes $Np^{235}$
decay schemes, 6: 736
electron capture and $\alpha$ decay, 6: 2537(J)
Neptunium isotopes $Np^{236}$
beta emission by, 6: 2946
Neptunium isotopes $Np^{237}$
gamma emission, in $U^{237}$ and $Am^{241}$ decay, 6: 4657
nuclear properties, 6: 1928
occurrence in nature, 6: 3811
separation from $Th^{230}$, 6: 3811
x-ray emission from, 6: 413
Neptunium oxides
entropy, 6: 4037
oxidation-reduction states in $Np_2O_5$, 6: 4474(J)
thermal capacity at low temperatures, 6: 4037
Nerve cells
effects of ultraviolet radiation on, in grasshoppers, 6: 43(J)
effects of x radiation on histology and cytochemistry of, 6: 6501(J)
Nerves
effects of radiation on physiological conduction of impulse in single, 6: 5946(J)
regeneration of, effect of x rays on, 6: 3496(J)
Nervous system
(See also Brain; Nerve cells.)
effects of ionizing radiation and metabolic inhibition on developing, 6: 3178(J)
effects of radiation on, 6: 3485
Network analyzers
(See Computers.)
Neurospora
mechanism of reversion in biochemical mutants of, 6: 5018(J)
Neutral red
antispasmodic effects on ileum and uterus, 6: 4343
Neutral violet
antispasmodic effects on ileum and uterus, 6: 4343
Neutrinos
abbreviated theory, 6: 5246(J)
charge-symmetrical interaction between nucleons and, 6: 2234(J)
in decay of $A^{37}$ by orbital capture, 6: 4273(J)
distinction between neutrino and antineutrino, 6: 1368(J)
emission from $P^{32}$, 6: 1909
existence, 6: 4291(J)
Fermi-type interactions, 6: 4923(J), 4999(J)
Fermi-type interactions and selection rules, 6: 5005(J)
Majorana theory of, argument against, 6: 4191(J)
mass determination, 6: 2470
rest mass of, upper limit for, 6: 1837(J)
theory of, in $Te^{130}$ double $\beta$ decay, 6: 1793
Neutron absorption cross sections
(See also as subheading under specific materials.)
noncritical assembly for measuring, of U, 6: 3384
temperature effects on, 6: 4195
Neutron activation cross sections
(See also as subheading under specific materials.)
measurement, 6: 2168
Neutron beams
collimation, 6: 1535
energy spectra of 184-in. cyclotron, 6: 4618
flux and spectrum measurement with anthracene scintillator, 6: 4589(J)
preparation of very low energy, 6: 493(J)
Neutron capture cross sections
(See also as subheading under specific materials.)
calculation from energy of evaporated neutrons, 6: 2486(J)
of stable isotopes by pile oscillator measurements, 6: 3666
tables for isotopes measured with ORNL pile oscillator, 6: 4623
Neutron choppers
(See Neutron spectrometers.)
Neutron cross sections
(See also as subheading under specific materials; see also main and subheadings for specific neutron cross sections, e.g., Neutron absorption cross sections; Neutron capture cross sections; see also the subheading neutron reactions under materials.)
for deuteron production in 100- to 300-Mev energy range, 6: 6169(J)
Doppler effect on, 6: 3417
effects of target movement on, 6: 3385(J)
inelastic-collision, measurement of, 6: 5214
measurement, 6: 493(J), 980, 1023(J), 1503, 1860, 2466, 2737, 3392
measurement by indium absorption method, 6: 3674
for $(n,\alpha)$ reactions on $Zn^{66}$, $Zn^{67}$, $Zn^{68}$, and Ni, 6: 6687(J)
regularities in total, for fast neutrons, 6: 4210(J)
tables, 6: 5177
theory of, 6: 686
Neutron diffraction analysis
(See also as subheading under specific material.)
principles and applications, review of, 6: 2119(J)
of single crystals, 6: 619(J), 6091
of spinel, $MgAl_2O_4$, 6: 6314(J)
Neutron emission
(See as subheading under specific materials.)
Neutron fission cross sections
(See as subheading under specific fissionable materials; see Capture-to-fission ratios.)
Neutron flux measurements
(See as subheading under specific materials.)
Neutron monochromators
crystals for use in, properties of, 6: 5427
germanium and $Fe_3O_4$ crystals as, 6: 6411
Neutron reactions
(See also as subheading under specific materials.)
statistical errors of expansion coefficients of experimental angular distributions, 6: 5883(J)
Neutron resonance cross sections
(See as subheading under specific materials.)
Neutron scattering cross sections
(See also as subheading under specific materials.)
of deuterons, phase-shift analysis of experimental data, 6: 4643(J), 4644(J)
effect of chemical binding on, theory, 6: 2503
interference involved in, radial distribution function in treatment of, 6: 2692(J)
measurement, 6: 3386(R), 5657(R)
of protons, effect of potential well shape on, 6: 1340
theory of, 6: 1830, 5215

Neutron shielding
(See also as subheading under heading for apparatus shielded.)
design, lecture on, ♦: 1360
theory, ♦: 441(J)
Neutron sources
absolute measurement with 4π Geiger counters, ♦: 3823(J)
calibration of standard Ra-Be, ♦: 4180
crystal spectrometer and mirrors as, ♦: 3674
design, ♦: 480(P)
monitoring with spark counter, ♦: 5450(J)
for radiation exposure chamber which also contains γ sources, design, ♦: 4889(R)
spectra of Be-Ra, ♦: 4866
time-dependent, in multiplying media, ♦: 4940(J)
Neutron spectra
(See also as subheading under specific materials; see also as subheading under specific elements and isotopes.)
measurement, ♦: 6628
measurement by two-plate method when direction of incident neutrons cannot be determined, ♦: 3044
method for studying fast neutron reactions by means of, ♦: 3720(J)
Neutron spectrographic analysis
(See as subheading under specific materials.)
Neutron spectrometers
crystal, design and performance, ♦: 5427
design, ♦: 641, 5657(R)
focusing, design and performance, ♦: 5499(J)
performance, ♦: 5833(R)
photographic, design and performance, ♦: 5642(J)
proton-pulse-amplitude and time-of-flight, theory and design, ♦: 3819
proton recoil, design, ♦: 6124
proton recoil fast-, operation and theory, ♦: 5832
recoil-proton type accepting only head-on collisions, design, ♦: 4876(J)
scintillation, design and calibration, ♦: 3004
for slow-neutron resonance region, ♦: 5434(J)
Neutron total cross sections
(See also as subheading under specific materials.)
tables, ♦: 2466
Neutrons
(See also Cosmic neutrons; Dineutrons; Fast neutrons; Neutron beams; Neutron sources; Photoneutrons; Tetraneutrons; Thermal neutrons.)
absorption, effects of geometry on, ♦: 3103(J)
absorption, reactor oscillator studies, ♦: 4916(J), 4917(J)
from (α,n) reactions in impurities in fissile material, ♦: 1536
attenuation in water and paraffin, ♦: 441
attenuation through a cylindrical duct in a shield, ♦: 4616
beta decay of, theory, ♦: 1920(J)
binding energy in light nuclei, discontinuities in, ♦: 6450(J)
cataract production by, ♦: 505
chemical effects of capture of, ♦: 1679(J)
chemical effects on aqueous phenol and benzene, ♦: 2045(J)
chemical effects on phosphates and sulfates, ♦: 3238(J)
coagulation of colloids by, ♦: 2331(J)
coherent scattering by hydrocarbons, ♦: 1903(J)
decay, ♦: 678(J)
density-indicator for, ♦: 1583(P)
detection, phosphors for, ♦: 5399(R)
detection and measurement, by liquid scintillators, ♦: 6410
detection and measurement, design of bolometer for, ♦: 2713
detection and measurement with boron-containing counter with paraffin moderator, ♦: 2158(J)
detection and measurement with $He^3$-filled proportional counter, ♦: 6131(J)
detection and measurement with Li salt phosphors, ♦: 5843(J)
detection and measurement with scintillation detectors, ♦: 5428
detection and measurement with thermopile, ♦: 6117
detection by activation of photocells by luminescent materials, ♦: 6221(P)
detection with lithium iodide scintillation detector, ♦: 3009(J), 3817
detection with spark counter, ♦: 5450(J)
differential scattering cross sections and spin-independent interaction between electrons and, ♦: 5691(J)
diffusion, ♦: 3071
diffusion, elementary theory of, ♦: 4613
diffusion, second-order theory, ♦: 4614
diffusion, tables of functions associated with Serber-Wilson method for calculating in a spherical geometry, ♦: 3660, 3661, 4573
diffusion, variational method for problems of, ♦: 6406(J)
diffusion lengths in heterogeneous reactor, theory, ♦: 4928(J)
diffusion lengths in paraffin, ♦: 4155(J)
disintegration of He by, ♦: 1004, 4223
dosage determination, ♦: 1(R)
dosage determination, instruments and techniques for, ♦: 5839(J)
effects on barley seed, ♦: 41(J)
Neutrons (cont'd)
effects on enzymatic activity, ♦: 3898(J), 3899(J), 3900(J)
effects on enzymes, ♦: 40(J)
effects on semiconductors, ♦: 557(J)
elastic and inelastic scattering from Fe, ♦: 3425(J)
elastic scattering by protons, energy dependence, ♦: 4240(J)
elastic scattering by protons, theory of, ♦: 3051(J)
emission from spontaneous fission of Th, ♦: 1851(J)
exchange force in interactions of, with protons, ♦: 1326
Fermi-type interactions, ♦: 4923(J), 4999(J)
Fermi-type interactions and selection rules, ♦: 5005(J)
from fission of $U^{235}$, energy distribution of, ♦: 698
flux distribution of, measurement with $Li_2B_4O_7$-loaded emulsions, ♦: 3647(J)
flux distribution of, methods of measurement, ♦: 2997
flux measurements, ionization chamber for, ♦: 6230(P)
flux measurements with NaI(Tl) crystals, ♦: 4880(J)
focusing of, magnetic lens for, ♦: 1860
formation of $H_2O_2$ by, in pile-irradiated aqueous B solutions, ♦: 5066(J), 5067(J)
inelastic scattering, angular distribution of γ rays following, ♦: 5675(J)
inelastic scattering, calculation of angular distributions, ♦: 5497(J)
inelastic scattering by deuterons, ♦: 1031(J)
interactions of polarization and convection currents of, with electrons, ♦: 4184(J)
interactions with electrons, ♦: 679, 1832(J), 6676(J)
interactions with electrons, comparison of phenomenological and meson-theory predictions, ♦: 5859(J)
interactions with electrons, effect on nucleon wave functional, ♦: 5460
interactions with electrons, one-body relativistic Dirac equation for, ♦: 4676
interactions with electrons, theory, ♦: 3877
interactions with electrons in pseudoscaler meson theory, ♦: 4183(J)
interactions with neutrons, ♦: 2182(J)
interactions with neutrons, indirect measurement by using γ spectra from $D(\pi^-,2n\gamma)$, ♦: 4617
interactions with protons, ♦: 386, 1346(J)
interactions with protons, symmetrical pseudoscalar meson theory of, ♦: 4609(J)
mass, compared with H mass, ♦: 349(J)
mass, from nuclear reaction energies, ♦: 992(J)
mass, from $T(p,n)He^3$, ♦: 1859
mass differences between protons and, from Q values of reactions involving $C^{12}$ and $C^{13}$, ♦: 4955(J)
mass differences involving, from nuclear reaction energies, ♦: 2753
$\pi^-$-mesons from, in deuterium by photon reactions, ♦: 323, 2162
measurement in ranges 0.3 to 15 Mev and above, ♦: 5433(J)
multiplicities of, from μ-meson capture in Pb, ♦: 1759(J)
permissible limits, ♦: 3182(R)
pick-up by protons in proton scattering, ♦: 4966
polarization and scattering by ferromagnetic materials, ♦: 1038(J)
polarization in scattering of, by protons, ♦: 715
polarization of D-D, at 45° to deuteron beam, ♦: 4185(J)
polarization of scattered, by LiD, ♦: 2946
production by (α,n) reactions in Be, ♦: 1537
proton interaction, theory, ♦: 4189(J)
proton scattering by, relativistic effects in, ♦: 3058(J)
radioactivity, ♦: 1909
reflection from single crystals, ♦: 493(J)
response of LiI, $Li_2SnO_3$, and NaI phosphors to, ♦: 5833(R)
response of organic scintillators to, ♦: 3864(J)
scattering in air, ♦: 1(R)
scattering, Fermi's scattering length in, ♦: 5897(J)
scattering, reciprocity theorem in, ♦: 5488
scattering, theory, ♦: 724(J)
scattering by bound protons and crystals, theory, ♦: 2503
scattering by crystals, multi-oscillator processes in, ♦: 4234(J)
scattering by deuterium, ♦: 2207(J), 2508(J)
scattering by deuterons, effects of tensor forces on, ♦: 4645(J)
scattering by deuterons, theory, ♦: 720(J)
scattering by H, ♦: 2505
scattering by H, azimuthal polarization in, ♦: 2498
scattering by H in soil, application to determination of soil moisture, ♦: 3968(J)
scattering by Fe, ♦: 3662(J)
scattering by liquids and crystals, theory, ♦: 2517(J)
scattering by $MnF_2$ and MnO, ♦: 2511(J)
scattering by meson fields, theory, ♦: 1042(J)
scattering by protons, ♦: 381, 387, 1043(J), 1340
scattering by protons, theoretical cross sections, ♦: 5493(J)
scattering by protons in presence of spin-orbit coupling, ♦: 3861(J)
scattering by system of heavy nuclei, theory, ♦: 3860(J)
scattering lengths for, and energy levels of compound nucleus, ♦: 2518(J)

Neutrons (cont'd)
scattering of 300-Mev, by nuclei, 6: 6434
slowing down, 6: 3071
slowing down by elastic collisions, Boltzmann equation and approximations, 6: 4615
slowing-down distribution in water, 6: 4181
slowing down in Al–water mixtures, 6: 4612
slowing down of fission, in graphite, 6: 4182
spin-orbit coupling and polarization, 6: 5180(J)
star production by, in nuclear emulsions, 6: 1534
tables for $\kappa$ and $\phi$ functions in, diffusion calculations, 6: 3830
total reaction cross sections for, with Be, C, N, and Na, 6: 1017(J)
transmission in polycrystalline media, extinction effects on, 6: 1341
transport theory, 6: 332(J), 384, 1285
transport theory of point source of, on free surface of a half space, 6: 6723
triplet force between, 6: 5399(R)
velocity distribution of, and neutron-electron scattering experiments, 6: 5691(J)
New Jersey Ceramic Research Station, Rutgers Univ.
progress reports on TiN cermets, 6: 6352(R)
New Mexico (Grant Co.)
exploration of lode deposits in Merry Widow Claim and White Signal District for U, 6: 1457
New York Univ.
progress reports, 6: 3015(R)
progress reports on AEC air pollution project, meteorological phase, 6: 677(R)
progress reports on fluorescence and conductivity phenomena, 6: 653(R), 1392(R), 1749(R), 4870(R)
progress reports on Ti-rich ternary phase diagrams, 6: 6062(R)
New York Univ., Coll. of Engineering
progress reports on meteorology, 6: 3828(R)
Nichrome
(See Nickel alloys.)
Nickel
anion exchange in HCl, 6: 1689(J)
arc welding using mixture of A and $H_2$, 6: 6217(P)
bonding of electroplates of, to Zr, 6: 2670
cathodic sputtering, 6: 252
chelation in ethanol by acetylacetone, malonates, and $\beta$-keto esters, 6: 1995
colorimetric determination in Ti and Ti alloys with dimethyl glyoxime, 6: 3523
corrosion, marine, 6: 5100(J)
corrosion by acids, 6: 1217
corrosion by $H_2O_2$, 6: 240(J)
corrosion by water, 6: 4776(R)
creep, effect of alloying elements on, 6: 6058
creep mechanism in, 6: 1733
deuteron range-energy relation in, 6: 1032(J)
electrolytic separation from V, 6: 90(R)
electron single scattering by, 6: 5220(J)
electroplating, 6: 599(R)
electroplating, effect of basis metal on, 6: 2008(J)
energy levels, 6: 6461(R)
energy levels, from proton inelastic scattering, 6: 4970(J), 5495(J)
extraction of Co from, in pulse column, 6: 5757
friction coefficients and surface damage of, 6: 2672
gamma reactions ($\gamma$,n), angular distribution, 6: 1861
gamma reactions ($\gamma$,p), angular distribution, 6: 5201(J)
magnetic properties, 6: 4797(J)
neutron cross sections, 6: 1526
neutron reactions (n,$\alpha$), cross sections for slow, 6: 6687(J)
neutron scattering by, 6: 980
neutron scattering cross sections, 6: 1304(R), 5657(R)
neutron scattering cross sections at 1.44 ev, 6: 3674
neutron transmission cross sections, 6: 2479(J)
proton elastic scattering cross sections, 6: 5692(J), 6179
proton reactions at high energies, 6: 5875(R)
radiation damage and recovery in, 6: 4978(R)
self-diffusion, determination by tracer techniques, 6: 6301(R)
spectral configuration interaction, matrix components, 6: 4672
stationary potential of spontaneous acid dissolution, 6: 4495(J)
surface tension and wettability data for, on ceramic oxides, 6: 2924
tensile properties, temperature effects on, 6: 4798(J)
wettability by sodium silicates, 6: 4780
Nickel alloys
arc welding using mixture of A and $H_2$, 6: 6217(P)
corrosion by Bi–Pb eutectic, 6: 901
corrosion by $H_2O_2$, 6: 240(J)
corrosion by liquid Bi, 6: 900
Nickel alloys (cont'd)
corrosion by $HNO_3$ and HCl in ammonium acid fluoride solutions, 6: 4058
corrosion by water, 6: 4776(R)
creep, effect of alloying elements on, 6: 6058
creep, effects of solid solution alloying and of stress and temperature on, 6: 5106(R)
crystal structure, effect of alloying elements on, 6: 6058
friction coefficients and surface damage of, 6: 2672
heating produced in, by absorption of neutron-capture $\gamma$ rays, 6: 4965
mechanical properties at high temperatures, 6: 2930
permeability of Inconel to He, 6: 272
tensile properties, effects of Co and Fe on, 6: 5106(R)
thermal and electric conductivities at high temperatures, 6: 2652(J)
Nickel–aluminum alloys
crystal structure in $\beta$ phase, 6: 242(J)
Nickel–aluminum compounds (intermetallic)
x-ray-diffraction analysis, 6: 199
Nickel ammonium sulfates
crystalline electric field in, 6: 6639
Nickel–chromium–cobalt alloys
constitution diagrams at 1200°C, 6: 2085
phase studies, 6: 2086
Nickel–chromium–cobalt–iron alloys
creep properties of, effects of coldwork on, 6: 1207
phase studies, 6: 2086
thermal rupture, effects of chemical composition on, 6: 5381
Nickel–chromium–cobalt–molybdenum alloys
phase studies, 6: 3785
Nickel–chromium–molybdenum alloys
phase studies, 6: 3785
Nickel–cobalt–molybdenum alloys
phase studies, 6: 3785
Nickel complexes
with vic-dioximes, magnetic properties and molecular structure, 6: 6007
with vic-dioximes, preparation and properties, 6: 5042
with 2-methyl-8-quinolinol, stability of, 6: 1141(J)
with sulfosalicylic acid, spectrophotometry of, 2611(J)
with tropolone and tropolone-derivative, formation constants of, 6: 6534
Nickel compounds
chelation of, with $\beta$-diketones, 6: 1634
Nickel–copper alloys
diffusion in, 6: 603(R)
self-diffusion, 6: 5388(R)
Nickel–copper compacts
radiation effects on intermetallic diffusion in, 6: 3783
Nickel–copper couples
intermetallic diffusion of, theory, 6: 2925
porosity of, metallographic studies, 6: 1474
Nickel–copper–zinc alloys
casting, corrosion, and physical properties, 6: 1465
Nickel ferrates
crystal structure and magnetic properties, neutron diffraction studies, 6: 6388
Nickel fluorides
crystal structure, 6: 2295
preparation and density, 6: 2295
preparation by $ClF_3$ fluorination, 6: 2618(J)
recovery from solid sludge, 6: 3459(P)
Nickel(II) fluorides
neutron diffraction analysis, 6: 1548
preparation, and magnetic susceptibility at intermediate temperatures, 6: 6078
Nickel–gold alloys
constitution diagrams, 6: 5782(R)
phase studies, 6: 1467(R)
thermodynamic properties, 6: 4794(R), 5782(R)
Nickel–iron alloys
activity coefficients, 6: 2932(R)
phase transformations in, 6: 600(R)
porous, powder metallurgy and physical properties, 6: 1233(R)
strains in, caused by martensitic transformation, 6: 594
surface tension of, effect of composition on, 6: 205
Nickel–iron-tantalum alloys
composition and physical properties, 6: 909(J)
Nickel isotopes
isotopic abundance of, mass spectrographic determination, 6: 2526
packing-fraction differences involving $Ni^{58}$, $Ni^{60}$, $Ni^{61}$, and $Ni^{62}$, mass-spectrographic measurement of, 6: 2991
properties and feasibility of use in chemical studies, 6: 5637(J)
Nickel isotopes $Ni^{56}$
formation, 6: 2107, 2525

Nickel isotopes $Ni^{56}$ (cont'd)
formation and half lives of, from Zn spallation, ◊: 1864
formation, mass, and decay scheme, ◊: 4661
half lives and $\gamma$ emission, ◊: 2525
Nickel isotopes $Ni^{58}$
binding energy, ◊: 989(J)
gamma reactions, $(\gamma,n)$, ◊: 1871(J)
neutron total cross sections as function of energy, ◊: 5499(J)
Nickel isotopes $Ni^{59}$
energy levels, from (p,n) reactions on $Co^{59}$, ◊: 4633(J)
mass, ◊: 368(J)
Nickel isotopes $Ni^{60}$
angular correlation between successive $\gamma$ rays, ◊: 5699(J)
binding energy, ◊: 989(J)
energy levels, lifetime of first-excited, ◊: 5699(J)
energy levels, spins of, ◊: 5511(J)
internal-pair-formation coefficient for 1.31-Mev $\gamma$ of, ◊: 5234(J)
neutron total cross sections as function of energy, ◊: 5499(J)
Nickel isotopes $Ni^{63}$
self-absorption of $\beta$ particles by, ◊: 4650(J)
Nickel isotopes $Ni^{64}$
internal conversion in, in decay of $Cu^{64}$, ◊: 3868
mass, ◊: 3054
Nickel isotopes $Ni^{65}$
neutron capture cross sections, ◊: 1628
Nickel–lanthanum alloys
magnetic properties, ◊: 4797(R)
Nickel nitrate–1-hexanol systems
phase studies, ◊: 81
Nickel oxides
ionization, ◊: 541(J)
reduction by $H_2$, ◊: 2305(J)
Nickel–silicon systems
titanium coated with, oxidation resistance of, ◊: 5608(R)
Nickel–titanium alloys
annealing, ◊: 4073
creep mechanism in, ◊: 1733
determination of phase diagram, with sponge Ti and Ni, ◊: 4073
preparation and polishing, ◊: 4073
Nickel–uranium alloys
magnetic susceptibility, ◊: 1433
Nickel–vanadium alloys
crystal structure of sigma phase, ◊: 1476(J), 3976(J)
Nicotine
biosynthesis of labeled, by tobacco plants, ◊: 2806(J)
biosynthesis, mechanism of, ◊: 1618
tissue distribution and excretion, ◊: 74(J)
Niobium
chemical separation from Ta and Ti in HCl, ◊: 2344(J)
chromatographic separation and determination, ◊: 4018(J)
colorimetric determination, ◊: 5311(R)
colorimetric determination with thiocyanate, ◊: 1143(J), 5055(J)
corrosion by Bi–Pb eutectic, ◊: 901
corrosion by liquid Bi, ◊: 900
determination in ores, ◊: 2939(J)
elastic constants of, measured by ultrasonic pulse technique, ◊: 2103
extraction from sovite, ◊: 219(J)
furnacing and casting, ◊: 2384(J)
gravimetric determination in Ti and Ti alloys, ◊: 3523, 5740
heat capacity of normal and superconducting, below 20°K, ◊: 3303(J)
magnetic structure of, from neutron-diffraction studies, ◊: 3674
mechanical properties at high temperatures, ◊: 2930
nuclear resonance and electronic structure, ◊: 4103(J)
purification by volatilization or solution of chlorides, ◊: 847(J)
quantitative determination by chromatography on cellulose, ◊: 6308(J)
separation from Ta, ◊: 846(J)
separation from Ta by solvent extraction, ◊: 2636(J)
spectrophotometric determination, ◊: 1405(J)
solubility in liquid Pb and Bi, ◊: 5602
stress-rupture of, in liquid Pb and Bi, ◊: 5602
volatilization rate in He d-c arc spectroscopy, ◊: 2607(J)
x-ray spectra, ◊: 97(J)
Niobium borides
crystal structure and properties, ◊: 120
preparation and physical properties, ◊: 4408(J)
Niobium bromides
Trouton constants, ◊: 810(J)
Niobium carbide–vanadium carbide–zirconium carbide systems
solubility relationships in, ◊: 2074
Niobium carbides
preparation, melting point, and crystal structure, ◊: 3566(J)
Niobium chlorides
equilibrium pressure of $NbCl_4$ dissociation, ◊: 5306(J)
Niobium chlorides (cont'd)
melting point, ◊: 2003(J)
Trouton constants, ◊: 810(J)
vapor pressure of solid and liquid $NbCl_5$, ◊: 5306(J)
Niobium–chromium alloys
crystal structure of, from x-ray-diffraction data, ◊: 1249(J)
Niobium compounds
preparation of anhydrous lithium metaniobate, ◊: 3227(J)
Niobium fluorides
preparation and physical properties, ◊: 5061(J)
vapor pressure, ◊: 810(J)
Niobium isotopes $Nb^{91}$
internal conversion and isomeric transition of, ◊: 419(J)
Niobium isotopes $Nb^{93}$
electron capture, ◊: 419(J)
gamma radiation associated with decay of, ◊: 4269(J)
Niobium isotopes $Nb^{93}$
isomeric transition, ◊: 4269(J)
preparation of carrier-free, ◊: 1422
proton reactions (p,n), threshold determinations, ◊: 5474(R)
Niobium isotopes $Nb^{94}$
half lives, ◊: 2228(J)
internal conversion and isomeric transition of, ◊: 409
Niobium isotopes $Nb^{95}$
anion exchange in HCl, ◊: 4014
beta spectrum, ◊: 5511(J)
decay schemes, ◊: 650(R), 3724(J)
internal conversion of $\gamma$ rays accompanying $\beta$ decay of, ◊: 5511(J)
internal conversion and isomeric transition, ◊: 419(J)
Niobium isotopes $Nb^{96}$
decay schemes, ◊: 419(J)
Niobium isotopes $Nb^{97}$
half life and $\beta$-$\gamma$ coincidences in decay of, ◊: 4667(J)
radioactivity, ◊: 3387(R)
Niobium minerals
chlorination and distillation analysis, ◊: 2608(J)
Niobium nitrides
preparation, ◊: 1642(J)
preparation by hot-wire reduction of chloride, ◊: 5048(J)
Niobium oxide–tantalum oxide systems
phase studies, ◊: 2307(J)
Niobium oxides
chlorination and distillation purification, ◊: 2608(J)
electrolysis in phosphate melts, ◊: 811(J)
Niobium phosphides
preparation by electrolysis, ◊: 811(J)
Niobium–tantalum alloys
tensile properties, ◊: 1475(R)
Niobium–uranium alloys
chemical analysis, ◊: 5050
Niobium–zirconium alloys
tensile properties, ◊: 3791
Nitration
(See as subheading under materials nitrated.)
Nitric acid
corrosive effects on stainless steel, Fe, and Cr-Fe alloys, ◊: 5103(J)
decontamination by distillation, ◊: 882(R)
dissolution rate of Mo in, at 25°C, ◊: 6039(J)
Nitridation
(See as subheading under specific materials.)
Nitrides
fluorination, ◊: 134(J)
preparation, crystal structure, and melting points of refractory, ◊: 3566(J)
Nitrogen
activation determination in metals, ◊: 6616(J)
adsorption on C, ◊: 1425(R)
atomic weight, ◊: 3972(J)
collision probability for slow electrons in, ◊: 1490
compressibility at 3097 to 6292 atm, ◊: 187(J)
compressibility isotherms and thermodynamic functions of mixtures of, with $H_2$ and $NH_3$, ◊: 1275(J)
diffusion in Zr, ◊: 898
disintegration by cosmic radiation, ◊: 3386(R)
drying by passing through NaK trap, ◊: 5335
effects of interstitial, on superconductivity of V, ◊: 1739(J)
effects on crystal structure of Zr, ◊: 229(R)
excitation potentials and range of $\alpha$ particles in, ◊: 4238(J)
excretion of, as index of casein metabolism of young calf, ◊: 5557
fixation by photosynthetic bacteria, ◊: 71
fixation in a crossed discharge, ◊: 620
fluorescence of, excited by $\alpha$ particles, ◊: 2521(J)
high-energy neutron and proton reactions of, ◊: 2493(J)

Nitrogen (cont'd)
ionization by $\gamma$ radiation in ionization chambers, 6: 6503(R)
molecular quadrupole moments of, theory, 6: 3383(R)
neutron and proton charge-exchange reactions in, 6: 1881(J)
neutron coherent scattering cross section, 6: 5501(J)
neutron inelastic-collision cross sections, 6: 5214, 5487
neutron total cross sections, 6: 1017(J), 1525, 4214(J)
nuclear resonance levels for low-energy $\alpha$ particles, 6: 5192(J)
positron scattering by, cloud chamber study, 6: 4548(J)
positron single elastic scattering by, 6: 5688(J)
prophylactic action against chromosome aberrations, 6: 1946
proton reactions $(p,\pi^-)$, 6: 5847
proton scattering cross sections, 6: 1546
radiosensitivity effects, 6: 48
removal from Zr, 6: 3576(J)
spectrophotometric determination in U oxides and uranyl sulfates, 6: 5308
surface reaction with Zr, 6: 898
thermal conductivity at low pressure, 6: 6591(J)
thermodynamic properties at zero pressure, 6: 3803
thermo-osmosis through rubber, 6: 1776(J)
transition probabilities for $N_2$ by dipole velocity operator, 6: 256
vacuum fusion determination in Mo, Th, Ti, U, V, and Zr, 6: 3254(J)
vacuum fusion determination in Ti, 6: 5603
x-ray scattering by, 6: 400(J)
Nitrogen (liquid)
heat exchange with Cu surface, 6: 5593
Nitrogen–chromium–titanium systems
phase studies, 6: 6062(R)
Nitrogen compounds
exchange of $O^{18}$ between water and, 6: 2855
Nitrogen ions
interaction of electron configurations, 6: 3750(J)
Nitrogen isotopes
energy states, 6: 1859
natural abundance ratios, 6: 6656(J)
Nitrogen isotopes $N^{13}$
energy levels and nuclear spin, 6: 708(J)
yield from $C^{12}$ (p,$\gamma$), 6: 1879(J)
yield from protons on medium and heavy elements, 6: 3853(J)
Nitrogen isotopes $N^{14}$
binding energy of, calculation, 6: 333(J)
charge on atoms of, after $C^{14}$ $\beta$ decay, 6: 5696
deuteron reactions (d,$\alpha$), 6: 1870(J)
deuteron reactions (d,n), Q values, 6: 5674(J)
deuteron reactions (d,p), 6: 3848(J)
energy levels, 6: 367(J), 1329(J)
energy levels from $C^{13}$ (p,$\gamma$), 6: 2188(J)
energy levels from $O^{18}$ (d,$\alpha$), 6: 4953(J)
energy levels, from proton inelastic scattering, 6: 5495(J)
gamma cross sections ($\gamma$,n), 6: 1332(J), 1861
gamma emission of, from $C^{13}$ (p,$\gamma$), 6: 1875(J)
gamma reactions, 6: 2196(J)
gamma reactions ($\gamma$,n), cross sections for, 6: 4954(J)
gamma reactions ($\gamma$,2n), identification and yields, 6: 5672(J)
gamma reactions ($\gamma$,p$\alpha$), identification in nuclear emissions, 6: 4943
ground state, parities of, 6: 3074, 5230
meson reactions ($\pi^-$,3n), 6: 2183(J)
neutron reactions (n,$\alpha$), angular distributions, 6: 5882(J)
neutron reactions (n,$\alpha$) and (n,p), 6: 1007(J)
neutron reactions (n,t), cross sections, 6: 5882(J)
neutron total cross sections, 6: 407(R)
nuclear electric quadrupole resonance, 6: 3057(J)
photodisintegration, 6: 3708(J)
proton reactions (p,$\gamma$), 6: 1535, 3083(J)
triton reactions, 6: 4225(J)
triton reactions, (t,pn), 6: 2757(J)
Nitrogen isotopes $N^{15}$
binding energy of, calculation, 6: 333(J)
concentration by exchange between $NH_3$ gas and $NH_4^+$ ions, apparatus for, 6: 2130(J)
deuteron reactions (d,p), 6: 1870(J), 3720(J)
energy levels, from $O^{16}$ (n,d), 6: 5882(J)
excited states in, as compound nucleus in n+$N^{14}$ reactions, 6: 4214(J)
formation by $N^{14}$ (d,p), 6: 1870(J)
infrared spectra of, isotope shift in, 6: 445
isotope effect in thermal deammonation of phthalamide, 6: 1118, 2600(J)
proton reactions (p,$\alpha$), (p,$\alpha\gamma$) and (p,$\gamma$), cross sections, 6: 4227(J)
targets of, preparation, 6: 2759
Nitrogen isotopes $N^{16}$
energy levels, from $O^{16}$ (n,p), 6: 5882(J)
Nitrogen–manganese–titanium systems
phase studies, 6: 6062(R)
Nitrogen mustards
chemical effects of x radiation on, 6: 1680(J)
degradation of, correlated with biological effects of, 6: 2565
effects on cell division in Paramecium, 6: 1108
effects on citrate synthesis, 6: 2557(R), 4352(R)
effects on level of serum polysaccharide in neoplastic diseases, 6: 6505(J)
effects on nucleic acid metabolism, 6: 3512
effects on protozoa, 6: 4692(R)
genetic and physiological effects, 6: 506(R)
synergistic action of, with $P^{32}$ and $Au^{198}$, 6: 2559(R), 3888(R)
toxicity of, influence of various chemicals on, 6: 5550(R)
toxicity of, failure of p-aminopropiophenone to reduce, 6: 2557(R)
Nitrogen oxides
effects on formation of triplet positronium in gases, 6: 1305
ionization potential of, by mass spectrography, 6: 291(J)
Nitrosyl chlorides
infrared spectra, 6: 3131(J)
Nitrosyl fluorides
force constants and thermodynamic properties, 6: 2007(J)
infrared spectra, 6: 3133(J), 3134(J)
Nitrous acid
reaction with alkylhydroxylamines, 6: 1628
Noise
(Including theoretical calculations and experimental observations.)
from instrument cables subjected to shock and vibration, 6: 2696
mathematical analysis, 6: 1285
mathematical analysis of linear, in filters or servomechanisms, 6: 2673
nonlinear devices, study by correlation methods, 6: 1751
response of nonlinear devices to pulsed signal and gated, 6: 2126
theory of thermal, in calorimeters, 6: 980(R)
Nonelectrolytes
(See also Electrolytes.)
solubility of solid, temperature dependence of, 6: 2606
Norman Bridge Lab. of Physics, Calif. Inst. of Tech.
progress reports, 6: 444(R), 446(R), 4579(R)
North Africa
uranium distribution in, 6: 2660(J)
North Carolina
pegmatite minerals of rare earth type in Henderson, Jackson, and Transylvania Counties, 6: 4496
North Carolina research reactor
design, 6: 3403
North Carolina State Coll.
progress report, 6: 1446(R), 3581(R)
Northwestern Univ.
progress reports on $Li^6$(n,$\alpha$) and neutron energy measurements with nuclear emulsions, 6: 3684(R)
Norwegian–Dutch heavy water reactor
(See JEEP reactor.)
NRX reactor (Canada)
general description, 6: 355(J)
neutron flux distribution and neutron economy, general discussion, 6: 5198(J)
slow neutron monitor for effluent, 6: 5417(R)
shutdown of, effect of delayed neutrons on, 6: 1831
Nuclear aircraft
turbojet engines for, 6: 1589
Nuclear alignment
(See as subheading under specific elements and isotopes.)
Nuclear charge
(See as subheading under nuclear particles.)
Nuclear chemistry
(See also specific elements, isotopes, and compounds; see also Radiation chemistry; Radiochemistry; Tracer techniques.)
analytical, bibliography on, 6: 5742(J)
Nuclear electric moments
(See also Nuclear magnetic moments.)
bibliography on, 6: 5870(J)
interaction in single crystals, 6: 4931(J)
quadrupole, calculated by spheroidal model, 6: 5863(J)
quadrupole, variation with nucleon number, 6: 6436(J)
spectra in solids, 6: 6722(J)
Nuclear emulsions
(See also Photographic emulsions; Photographic film detectors; Photographic film.)
application to measuring neutron energy when direction of incident neutrons cannot be determined, 6: 3044
blackening by $\beta$ particles, 6: 1287
calibration, 6: 661(J)
calibration, for scattering constant, 6: 1807(J)
carbon nucleus reactions in, 6: 5876

Nuclear emulsions (cont'd)
containing heavy water, study of deuteron photodisintegration by, ⚷: 3669(J)
contraction of, elimination by glycerin treatment, ⚷: 2445(J)
cosmic ray star-size distributions in, effects of emulsion composition on, ⚷: 3313(J)
cosmic stars in, associated pairs of shower particles in, ⚷: 4533(J)
cylindrical technique in study of radioactivity of solutions, ⚷: 4150(J)
determination of Th and U by statistical distribution of $\alpha$ particles in, ⚷: 5148(J)
development after exposure to intense neutron and $\gamma$-ray fluxes, ⚷: 6667(J)
development of latent image in, ⚷: 1289(J)
development of "Type GO", ⚷: 4158(J)
double star effect in, when exposed to cosmic rays, ⚷: 3602(J)
effect of variables on track length in, ⚷: 5446(J)
electron and proton multiple coulomb scattering in, ⚷: 1550(J)
electron–electron scattering determinations with, ⚷: 917
electron range-energy relations in, ⚷: 1295(J), 4976(J)
electron track recognition in, ⚷: 6633(J)
energy measurements of ionizing particles with, ⚷: 3012(J)
eradication of proton tracks in, variation with depth and energy, ⚷: 5837(J)
grain-density distribution for relativistic particles, ⚷: 4884(J)
grain density of electron tracks in, ⚷: 1293(J)
Herschel effect and selective erasing of, ⚷: 4883(J)
ionization loss at relativistic velocities in, measurement, ⚷: 6630(J)
ionization produced by charged particles in, photometric measurement, ⚷: 2718(J)
loading with wires, ⚷: 308(J)
measurement of $\alpha$-particle and triton tracks in, ⚷: 644
measurement of low-energy tracks by $\delta$-ray counting, ⚷: 6420(J)
measurement of thickness changes in as function of humidity, ⚷: 298
$\kappa$-meson or V particle event in, ⚷: 4817(J)
in $\mu$-meson mass determinations, ⚷: 1297(J)
multiple scattering in, measurement, ⚷: 2513(J)
multiple scattering of charged particles in, procedures for, ⚷: 4239(J)
neutron flux measurement with $Li_2B_4O_7$-loaded, ⚷: 3647(J)
in neutron spectroscopy, processing techniques and methods of data analysis, ⚷: 3694(R)
nuclear disintegrations produced in, by cosmic rays, ⚷: 259(J), 1761(J)
photometric identification of tracks in, ⚷: 3365(J)
photometric measurement of low-energy tracks in, ⚷: 5149(J)
preparation and use with $\alpha$ emitters, ⚷: 5914
preparation of, and cosmic particle tracks in, ⚷: 1512
properties of, review, ⚷: 3011(J)
proton and meson ranges in, ⚷: 391(J)
proton range-energy relation in dry, ⚷: 2157(J)
in radiometric analysis of Th and U ores, ⚷: 3967(J)
response to ionizing radiations, analogy with scintillation crystals, ⚷: 4585(J)
scattering constant for Ilford G5, ⚷: 2206(J)
sensitivity to x radiation, ⚷: 311(J)
stars and single proton tracks in, under $\gamma$ irradiation, ⚷: 3409(J)
stars and single tracks in, analysis and origin, ⚷: 1267(J)
stars produced in, by neutrons and protons, ⚷: 1534
stopping power per atom, ⚷: 2726(J)
techniques, with capillary tubes, ⚷: 4889(J)
techniques for measurement of quantity of radioactive elements in rocks, ⚷: 4985(J)
techniques for studying nuclear collisions with, ⚷: 1328(J)
thickness measurement of, ⚷: 642
tracks of conversion electrons accompanying complex $\alpha$ decay, ⚷: 5510
tracks of fast $C^{12}$ nuclei in, ⚷: 656
use in mass spectroscopy, ⚷: 6627
Nuclear engineering
contribution to nuclear energy development, lecture on, ⚷: 1188
curriculum at North Carolina State College in, ⚷: 1194
curriculum of Oak Ridge School of Reactor Technology, ⚷: 1192
impact of atomic energy on training of engineers, lecture on, ⚷: 1191
in nuclear energy development, Third Annual Oak Ridge Symposium 1951, ⚷: 1186
role and training of nuclear engineers, lecture on, ⚷: 1187
scope of, lecture on, ⚷: 1190
training programs in, results of a questionnaire on, ⚷: 1193
Nuclear induction
amplitude measurement of nuclear signals, ⚷: 4937(J)
use in studying reduction kinetics of Eu ions, ⚷: 5756(J)
Nuclear isomers
multipole transitions and lifetimes, theory, ⚷: 5181(J)
relative yields as function of bombarding-particle energy, ⚷: 5298(R)
relative yields from thermal (n,$\gamma$) reactions, ⚷: 2586
Nuclear magnetic moments
(See also Nuclear electric moments.)
Nuclear magnetic moments (cont'd)
bibliography, ⚷: 5870(J)
calculations, ⚷: 4619
correction for effect of atomic core, ⚷: 3835(J)
derivations of, from the Schmidt lines, ⚷: 3066(J)
determination of g factor and, of intermediate level in $\gamma$-$\gamma$ cascade, ⚷: 5463(J)
effects of departures from single particle model on, ⚷: 6440
effects on width of lines in x-ray spectra, ⚷: 2478(J)
of even-odd nuclei, theory, ⚷: 2475(J)
hyperfine structure anomaly in measurements of, ⚷: 1839
interaction-moment contributions to, theory, ⚷: 6157(J)
and j-j coupling shell model, ⚷: 1845(J)
measurement, ⚷: 1307(J)
measurement, apparatus for, ⚷: 1849(J)
measurement, cryogenic factors in, ⚷: 3299(R)
measurement by nuclear resonance absorption, ⚷: 995(J)
non-additivity of, in heavy nuclei, ⚷: 5660
relation to nuclear structure, ⚷: 3401(J)
review, ⚷: 6441(J)
theory, ⚷: 6679
Nuclear magnetic resonance
(See also as subheading.)
absorption from four-proton system in $K_2HgCl_4 \cdot H_2O$, ⚷: 6443(J)
chemical shifts and magnetic shielding in, calculation, ⚷: 3678(J)
of hydrogen absorbed into Pd wires, ⚷: 4624(J)
measurement, bridged tee director for, ⚷: 6652(J)
measurement, equipment for, ⚷: 3052(R)
measurement by pulse method, determination of accuracy, ⚷: 5183(R)
modulation effects in, theory, ⚷: 5187(J)
nuclear spin echoes of $F^{19}$, ⚷: 2169(J)
nutational resonance, ⚷: 2473(J)
spin echo envelope modulation effect in, ⚷: 2170(J)
steady-state transient technique in, ⚷: 3067(J)
theoretical interpretations of multiple lines of, ⚷: 351(J)
theory and methods of measurement, ⚷: 5459(R)
Nuclear models
alpha and central, for light nuclei, ⚷: 2749(J)
compressible drop, variations of radius and binding energy in, ⚷: 5658(J)
configuration probabilities for, derivation of, ⚷: 4207(J)
energy levels, ⚷: 691(J)
in fission, ⚷: 1840
of heavy odd-A nuclei, ⚷: 6157(J)
lattice structure with stationary nucleons, ⚷: 5171(J)
for light nuclei, ⚷: 1839
single particle, effects of departure from, on nuclear magnetic moments, ⚷: 6440
statistical, and angular distribution of $\gamma$ rays following inelastic-scattering processes, ⚷: 5675(J)
Thomas-Fermi angular momentum distributions in, ⚷: 4933(J)
Nuclear models (collective)
features which tend to explain magnetic moments, ⚷: 6679
Nuclear models (drop)
evaporation theory of disintegration, ⚷: 4948(J)
and first-excited states of even-even nuclei, ⚷: 4926
quantization of radiation processes in, ⚷: 3864(J)
surface tension, ⚷: 4532(J)
Nuclear models (optical)
angular distributions of elastically scattered protons according to, ⚷: 4974(J)
Nuclear models (shell)
accuracy of, experimental tests of, ⚷: 3046(J)
beta decay in relation to, ⚷: 740(J), 4188(J)
beta transitions in, ⚷: 4922(J)
binding energy, variation with mass number, ⚷: 6675
calculation of $\mu$-meson capture in Pb and Ca using, ⚷: 6142(J)
closing of proton subshell at Z = 58, ⚷: 3049(J)
comparison with atomic shell structures, ⚷: 685(J)
configurations, theorems on complementary, ⚷: 6146
contradiction to, in $Hf^{177}$, ⚷: 2173(J)
and coupling constants for $\beta$ decay of mirror nuclei, ⚷: 4254(J)
coupling of orbital and angular moments in odd-odd nuclei, ⚷: 4192(J)
coupling of photonucleons in, ⚷: 6438(J)
energy levels calculated with harmonic oscillator wave functions, ⚷: 3832(J)
energy levels from j-j coupling model, ⚷: 5184
energy variation of asymmetric, ⚷: 1934(J), 4921(J)
evidence for, ⚷: 3872(J), 3873(J)
in explanation of $\beta$-decay theory, ⚷: 408
isotope shift increases at magic numbers, ⚷: 3047(J)
magic numbers, ⚷: 1314(J)
multipole isomeric transitions in, ⚷: 5181(J)
neutron and proton binding energies, discontinuities in, ⚷: 1424(R)

Nuclear models (shell) (cont'd)
neutron and proton binding energies in light nuclei, discontinuities in, 6: 6450(J)
nuclear magnetic moments using j-j coupling, 6: 1845(J)
nuclear quadrupole moments variation with nucleon number in, 6: 6436(J)
orbital coupling in, 6: 4187(J)
splitting of states of $(lj)^n$ under influence of central forces, 6: 3842(J)
tables of structure of, for odd nuclei and odd-odd nuclei, 6: 4936(J)
term splitting in, 6: 5861(J)
test of, by measurement of angular distribution of $P^{31}$ (d,p), 6: 5673(J)
theory, 6: 4724(R)
theory, applied to isomers, 6: 5185
unpaired spin effects for neutrons and protons, 6: 2586
Nuclear moments
(See subheadings nuclear electric moments; nuclear magnetic moments; see Nuclear electric moments; Nuclear magnetic moments.)
Nuclear particles
(See also the specific particle concerned; see also Elementary particles.)
absorption mechanisms of charged, in metals, 6: 3098(J)
angular correlations of, in nuclear resonance reactions, 6: 374(J)
angular correlations of emitted, influence of magnetic fields on, 6: 346(J)
angular momentum in nonlocal field theory, 6: 2797(J)
anomalous scattering of charged, theory, 6: 4652(J)
charge, mass, and energy of, determination by nuclear emulsions, 6: 3011(J)
construction of interaction potential from a phase shift, 6: 6205(J)
Coulomb functions for heavy, 6: 4942
density of, in the nucleus, 6: 686
derivation of a wave equation for, with two mass states and a positive charge density, 6: 1562(J)
detection and measurement, review of instruments for, 6: 4587(J)
detection and measurement, using scintillation detectors, 6: 3000
electromagnetic properties of spin-one, and spinor-pair theory of vector, 6: 2741(J)
emission of, angular correlation functions, 6: 350(J)
energy-level distribution of, application of Gentile's intermediate statistics to, 6: 3625(J)
exchange reactions with deuterons, 6: 3690(J)
interaction between two, in nonlinear field theory, 6: 2237(J)
interaction moments, 6: 335
interactions, application of theorems of complementary configurations, 6: 6146
interactions, nuclear force distances in, 6: 5864
interactions, quantum mechanical description of, 6: 683(J)
interactions, time-dependent, 6: 682(J)
interactions, two-body, 6: 5857
interactions with a central pseudoscaler field, 6: 752(J)
invariance conditions on scattering amplitudes for spin-$\frac{1}{2}$, 6: 3099(J)
ionization loss by relativistic, theory, 6: 5216(J)
mass spectra of elementary, 6: 2729(J)
multiple scattering, measurement in photographic emulsions, 6: 2513(J)
multiple scattering, theory as applied to cloud-chamber measurements, 6: 5496(J)
multiple scattering of charged, theory, 6: 1902(J)
multiple-scattering theory for fast singly-charged, 6: 1807(J)
pair production in collisions of, 6: 1333(J)
primary specific ionization for high-energy, dependence on momentum, 6: 1758(J)
radiative correction for electron collision loss of, 6: 3100(J)
range straggling of nonrelativistic charged, 6: 1897(J)
relativistic dynamics of a system of particles interacting at a distance, 6: 2790(J)
relativistic two-body problem in quantum theory, 6: 3139(J)
scalar or pseudoscalar scattering cross sections for spin-0, -1, or -$\frac{1}{2}$ particles, 6: 4293(J)
scattering, nomogram for, 6: 3102(J)
scattering, variational principle in theory of, 6: 5494(J)
scattering amplitude calculation for two-body problem, 6: 6184(J)
scattering and absorption, optical vs. compound models for, 6: 3859(J)
scattering by many-body systems in terms of two-body collision parameters, 6: 5222(J)
scattering by meson fields, theory, 6: 1042(J)
scattering by a static potential, validity of Born-expansion treatment of, 6: 5690(J)
scattering cross sections for arbitrary-spin, theory, 6: 4288(J)
scintillation response of organic crystals to low-energy, exciton theory, 6: 4151(J)
second-quantized theory of spin-$\frac{1}{2}$, in nonrelativistic limit, 6: 3878(J)
spin, relativistic theory of, 6: 457(J), 6622(R)
spin-spin relaxation in systems of two, 6: 2548(J)
Nuclear particles (cont'd)
spins, reactions, and existence of, 6: 1818
stopping of fast charged, method for comparing experimental data on, 6: 3091(J)
transfer of electronic binding energy to incoming and outgoing, 6: 4622
velocity-dependent potentials for, in given orbits, 6: 3732(J)
virial theorem for Dirac particles, 6: 4284(J)
virtual levels and scattering cross sections, theory, 6: 5182(J)
Nuclear physics
advancements in, in the last twenty years, 6: 2463(J)
basic concepts of, lecture on, 6: 1261
bibliographies, for engineering education, 6: 6346
four-body problems in, 6: 4958(J)
Harwell contributions to, survey of, 6: 1524(J)
high vacuum techniques in, 6: 2917(J)
laboratory manual used for reactor physics course at Oak Ridge School of Reactor Tech., 6: 6145
medium-energy, review of, 6: 5862(J)
proceedings of International Conference on, Sept. 1951, Univ. of Chicago, 6: 1833
research program at the Institute for Nuclear Physics, Hamburg, 6: 1372
research program at the Universities of Brussels and Louvain, Belgium, 6: 1523
research program of European laboratory for, sponsored by UNESCO, 6: 4618
summaries of papers presented at "Conference on Problems of Quantum Physics," Copenhagen, Denmark, July 6-10, 1951, 6: 1522
Nuclear Physics Lab., Columbia Univ.
progress reports, 6: 2468(R), 5657(R)
Nuclear power
(See also Nuclear aircraft.)
application to rocket propulsion, 6: 1066
economic and industrial aspects, 6: 1001(J)
economic aspects, 6: 1068(J), 1317, 4339(J)
heating of building at the Atomic Energy Research Establishment, Harwell by, 6: 1068(J)
metallurgy in development of, 6: 2927
production, 6: 489, 490
Nuclear power plants
low-temperature steam power cycles for water-cooled reactors, 6: 4681
Nuclear radiation
(See also specific radiations, e.g., Alpha particles; see also subheadings under specific elements and isotopes for emitted radiations, e.g., neutron emission. See also Nuclear reactions.)
angular correlation functions of, 6: 990(J)
theory of scattering of, impulse approximation, 6: 1544, 2798(J)
Nuclear reactions
(See also as subheading under specific radiations; see also the subheading nuclear properties and subheadings in the form neutron reactions under specific elements and isotopes; see also Beta decay; Fission; Neutron cross sections; Thermal nuclear reactions.)
angular distribution of charged particles in, apparatus for measurement of, 6: 5643(J)
angular distribution of emitted particles in, methods of measurement, 6: 3075
charge independence in, tests for, 6: 2465
collision matrix calculations for, 6: 2754(J)
detailed balancing principle for, 6: 5858
deuteron emission in, effect of polarization on, 6: 4224(J)
dispersion theory of, sum rules in, 6: 5202(J)
distribution of products of, theory, 6: 360
effect of nuclear stability of target element on, 6: 3388(J)
energetics of, effect of atomic binding on, 6: 4622
energy, 6: 1533
energy, electrostatic analysis of, 6: 6454
energy, tables, 6: 5456(R)
energy of ground state, for $z \leq 20$, 6: 2753
energy requirements for, calculation of, 6: 1019(J)
excitation functions and cross sections for (p,n), 6: 1022(J)
excitation functions to 100 Mev, cyclotron studies and techniques, 6: 6448(J)
excitation in noncapture, at high energies, 6: 4951(J)
gamma, relative yields, 6: 5676(J)
inelastic scattering processes in continuum theory, 6: 6458(J)
inelastic scattering with $\gamma$ emission, angular correlation, 6: 6459(J)
isotopic-spin conservation in, 6: 5461
lecture on, 6: 1261
measurement of, by comparison with an ionization chamber, 6: 1576(P)
photographic technique for study of, 6: 1328(J)
produced by heavy-ion beams, possibilities of, 6: 5207(J)
quantum mechanical description of, 6: 683(J)

Nuclear reactions (cont'd)
selection rules for decay of nucleus after absorption of $\gamma$ or mesonic radiation, 6: 5478(J)
star production by radiation from, 6: 4943
statistical fluctuations in nuclear evaporation, 6: 6170(J)
time-dependent description of, 6: 682(J)
time reversal in polarized, 6: 4634(J)
total cross sections for, variation with energy of bombarding particle, 6: 5879(J)
widths and spacing of resonance lines in, dispersion theory, 6: 5202(J)
Nuclear spallation
(See as subheading under the specific element or isotope spalled; see Spallation products.)
Nuclear spectra
multiplicities, equations for, 6: 4920(J)
Nuclear spin
(See also as subheading under isotopes.)
angular momentum, transformation amplitudes for vector addition of, 6: 4930(J)
measurement by hfs displacement, 6: 6447(J)
Nuclear stability
(See as subheading under specific isotopes.)
Nuclear structure
(See also as subheading under specific elements and isotopes; see also Nuclear models.)
bibliography, 6: 5868(J)
charge-symmetry hypothesis in, experimental tests of, 6: 3048(J)
effects of nucleon pairing and magic numbers on $\beta$ transitions, 6: 6677(J)
effects of shell structure on stability of heavy elements, 6: 2174(J)
momentum distribution of nucleons, 6: 1818
nucleonic shells in atomic nuclei, existence of, 6: 3689(J)
relation of nuclear magnetic moments to, 6: 3401(J)
review, 6: 5862(J)
study of, by use of heavy-ion beams, 6: 5207(J)
symmetry effects on dipole radiation, 6: 3101(J)
wave functions for the p shell, 6: 1364(J)
Nuclear theory
(See also Meson theory; Nuclear models.)
adiabatic nuclear potentials, 6: 4199(J)
adiabatic nuclear potentials, derivation of, 6: 3138(J), 3142(J)
application of resolvent operators to ground-state determination, 6: 5003(J)
book: "The Elements of Nuclear Reactor Theory," 6: 5873(J)
charge-independence hypothesis of nuclear interactions, 6: 2723(J)
charge independence of nuclear forces deduced from nuclear reaction data, 6: 5461
cosine interaction between nucleons, 6: 5865(J)
coupling of nuclear surface oscillations to motion of nucleons, 6: 2742(J)
differential cross section for bremsstrahlung and pair production, 6: 5190(J)
electrical dipole $\gamma$ cross sections, 6: 1013(J)
energy levels of light nuclei, bibliography, 6: 5869(J)
impulse approximation for neutron scattering by bound protons, 6: 4973(J)
influence of charge independence of nuclear forces on electromagnetic transitions, 6: 5667(J)
influence of relativistic corrections on singular nuclear potentials, 6: 5244(J)
integral cross section for bremsstrahlung and pair production, 6: 5191(J)
j-j coupling, fractional parentage coefficients and the central-force energy matrix for equivalent particles, 6: 4925
Majorana theory of neutral particles, argument against, 6: 4191(J)
meson theory of forces in, 6: 4212(J)
nonlinear terms in saturation of nuclear forces, 6: 2460(J)
nuclear forces, low energy properties of, 6: 5864
nucleon interactions through pseudoscalar coupled mesons, 6: 6435
numerical net-point method for solving Schrödinger's equation for a system of particles, 6: 3837(J)
potential well for heavy nuclei by using nonlinear meson theory, 6: 3396(J)
quantization of neutral scalar meson theory with nonlinear coupling, 6: 4903(J)
relativistic, of nuclear forces, 6: 2738(J), 2739(J), 3050(J)
saturation property of nuclear forces, 6: 4213(J), 4631(J)
shell structure in nuclei, 6: 3689
spin-orbit interaction, 6: 4631(J)
symmetrical pseudoscalar meson theory of nuclear forces, 6: 5457
triplet force between like nucleons, 6: 1561
Nucleation
(See Phase studies.)
Nuclei
(See also subheadings under elements and isotopes for properties and reactions of specific nuclei; also headings beginning with Nuclear.)
acceleration of multiply charged, 6: 379
adiabatic potentials, 6: 4199(J)
alignment by magnetic resonance, 6: 1311(J)
alpha decay rates, correlation of, 6: 363
alpha emission from even-even, 6: 415
alpha emission from medium heavy, 6: 410
angular correlation of successive quanta emitted by aligned, 6: 5236(J)
angular correlation of successive radiations from, theory, 6: 2745(J), 4287(J)
angular momenta of, quantum mechanical treatment, 6: 3351
angular momentum distribution in Thomas-Fermi model of, 6: 4933(J)
anomalous scattering of charged particles by, theory, 6: 4652(J)
beta and $\gamma$ emission from light, 6: 2753
beta disintegration energies for elements 76–98, 6: 5522(J)
beta emission, energy of, 6: 6531(R)
beta stability characteristics, 6: 4208(J)
binding energies, 6: 4202(J), 4208(J)
binding energies, variation with mass number, 6: 6675
binding energies for neutrons, 6: 4194
binding energies of neutrons and protons in light, discontinuities in, 6: 6450(J)
charge distribution in, 6: 3069(J)
classification of isomers of, 6: 1839
configuration probabilities for, derivation, 6: 4207(J)
coupling in p-shell, 6: 4197
coupling of orbital and angular moments, 6: 4192(J)
decay from excited level of 0 spin to lower level of 0 spin, 6: 4190(J)
decay schemes, review, 6: 5185
deuteron reactions (d,n) and (d,p), Born approximation theory of, 6: 5670
deuteron reactions (d,p), 6: 3720(J)
deuteron reactions (d,p), angular distribution of, 6: 6621(R)
disintegration, evaporation theory, 6: 4948(J)
disintegration by positron-electron (K) annihilation, 6: 2490(J)
dissociation by synchrotron $\gamma$ rays, 6: 3490
electron capture by, transformation energies of elements 79–85, 6: 5522(J)
electron scattering by, dependence of intensity on scattering angle, 6: 6181(J)
electron scattering by, higher Born approximations in theory of, 6: 4647(J)
electron scattering by point and extended, phase shift between partial waves, 6: 5498(J)
elementary-particle scattering by complex, generalization of the impulse-approximation method, 6: 5904(J)
emission of large fragments from, on basis of the liquid drop model, 6: 4532(J)
emission of nucleons from, by high-energy nucleon-nucleus collision, 6: 3702(J)
energy and electric quadrupole moments of, 6: 344(J)
energy levels, regularities in, 6: 2477(J)
energy levels, tables, 6: 5456(R)
energy levels, use of scintillation spectrometer in studying, 6: 424(J)
energy levels of asymmetric-top, near the prolate symmetric rotor limit, 6: 3379(R)
energy levels of heavy, regularities in, 6: 6626
energy levels of light, bibliography, 6: 5869(J)
energy levels of light, two series of, 6: 6148(J)
excitation by absorption of $\pi$-mesons, 6: 5852(J)
excitation by fast electrons, theory, 6: 6174(J)
excited levels, determination of g factor and magnetic moments, 6: 5463(J)
excited states, calculation for odd-odd, 6: 5887(J)
excited states and structure of even-even, 6: 1836(J)
final state of, calculation from internal conversion coefficient, 6: 1064(J)
finite size of, effect on elastic scattering of electrons, 6: 1904(J)
first-excited states and the liquid-drop model for even-even, 6: 4926
forces of, meson theory, 6: 4199(J), 4212(J)
gamma absorption cross sections, 6: 334
gamma cross sections for processes not involving pion production, theory, 6: 5471
gamma emission of, theory, 6: 983(J)
gamma radiation from aligned, angular distribution and polarization of, 6: 5237(J)
gamma radiation from polarized, angular distribution of, 6: 1842(J)
gamma reactions, relative yields, 6: 5676(J)
gamma reactions ($\gamma$,n), 6: 364, 1326, 2491(J)
gamma reactions ($\gamma$,n), excitation functions from 13.5 to 70 Mev, 6: 6433
gamma reactions ($\gamma$,n), neutron production cross sections for, 6: 5877
gamma reactions ($\gamma$,n) and ($\gamma$,p), statistical analysis of, 6: 1858
gamma reactions ($\gamma$,p), theory, 6: 3082(J)

Nuclei (cont'd)
gamma reactions (γ,p), theory of meson emission and reabsorption in, 6: 3408
gamma reactions (γ,π), theory, 6: 3024(J)
high-energy collisions with nucleons, production of heavy fragments in, 6: 3596(J)
interactions with cosmic rays, bibliography, 6: 5806(J)
interactions with fast π-mesons, 6: 1826(J)
interactions with high-energy nucleons, experimental test of nucleonic cascade mechanism for, 6: 2764(J)
interactions with nucleons, application of self-consistent field, 6: 6487(J)
isomers of, nuclear shell theory applied to, 6: 5185
j-j coupling in, 6: 3842(J)
K-capture of, in relation to Z, 6: 1053(J)
lifetimes of excited states, use of γ-ray Doppler effect in measuring, 6: 6161(J)
magic numbers, 6: 1314(J)
magnetic moments interaction-moment contributions to, 6: 6157(J)
magnetic moments of even-odd, theory, 6: 2475(J)
magnetic resonance of, Bloch formulation for interpretation of, 6: 348(J)
magnetic shielding of, in solids and molecules, 6: 3678(J)
mass of, from nuclear reaction energies, 6: 992(J)
mass of, principally in region of 82 neutrons, 6: 3054
mass of, tables, 6: 4194
$\pi^-$-meson absorption, x-ray emission from, 6: 6426
$\pi^0$ mesons from protons on, atomic-number dependence of yield, 6: 4597
$\pi^\pm$ mesons produced by γ reactions in, cross sections and $\pi^-/\pi^+$ ratio, 6: 4902(J)
mirror, interaction responsible for β decay of, 6: 5233(J)
mirror, properties of higher-order, 6: 3670(J)
neutron capture cross sections, 6: 6624(R)
neutron cross sections, measurement of, 6: 3392
neutron inelastic scattering by, calculation of angular distributions, 6: 5497(J)
neutron-proton scattering by, 6: 4212(J)
neutron reactions (n,γ), 6: 5472
neutron reactions (n,d), mechanism and total cross sections, 6: 6169(J)
neutron scattering by systems of heavy, 6: 3860(J)
neutron scattering cross sections, 6: 6434
neutron scattering lengths of, and energy levels of compound, 6: 2518(J)
neutron total cross sections, at indium resonance of 1.44 ev, 6: 6624(R)
neutron total cross sections, regularities in, 6: 4210(J)
nuclear magnetic moments, non-additivity of, 6: 335
nuclear magnetic moments, theory, 6: 684(J)
nuclear spin of, theory, 6: 684(J)
nucleon and π-meson scattering by, optical vs. compound models for, 6: 3859(J)
nucleon scattering by, Fermi's scattering length in, 6: 5897(J)
nucleon scattering by, optical model for, 6: 5221(J)
nucleon scattering in high-energy collisions with mean-square-angle calculations, 6: 5900(J)
orientation by polarized light, 6: 3060(J)
packing fraction curves, 6: 1793
periods of oscillation of, by virial theorem, 6: 3733(J)
photoneutron thresholds, 6: 706(J)
polarization and alignment, 6: 1846(J)
polarization and alignment, theory, 6: 3666
positron scattering cross sections for coulomb fields of, 6: 5906(J)
prediction of β-stable even-mass-number, 6: 6437(J)
proton and neutron binding energies in, calculation, 6: 4664(J)
proton elastic scattering by, theoretical angular distributions, 6: 4974(J)
proton reactions (p,γ), 6: 337
proton reactions (p,n), excitation functions for, 6: 1022(J)
proton reactions (p,p), 6: 3386(R)
proton reactions (p,$\pi^0$), 6: 4594
proton reactions (p,$\pi^0$), yield as function of atomic number, 6: 5454(R)
proton reactions of light, 6: 6624(R)
quadrupole and magnetic moments of light, calculation of, 6: 3063(J)
quadrupole moments, calculated by spheroidal model, 6: 5663(J)
radiation emission, angular correlations by statistical matrix methods, 6: 6115
radiative correction to angular distribution of recoil, from electron scattering, 6: 1545
radii and binding energies, calculated by compressible-drop model, 6: 5658(J)
radii of, review of methods of measurement, 6: 1313(J)
scattering by, in terms of two-body collision parameters, 6: 5222(J)
shell effects in energy surface, 6: 5298(R)
shell structure and properties of, 6: 982
spins of excited states of even-even, 6: 5194(J)

Nuclei (cont'd)
surface tension and binding energy of, calculation, 6: 333(J)
vibration-rotation spectra of, 6: 981(J)

Nuclei (cells)
(See also cytological subheadings under organs, organisms, radiations, etc.; see also Chromosomes; Cytobiology; Cytochemistry; Genetics; Mitosis; Nucleic acids; Nucleotides.)
analysis for ribonucleotides, 6: 112(J)
disruption of mitochondria of Saccharomyces by ultraviolet radiation, 6: 4354
isolated from rat liver, effect of various enzymes on structure of, 6: 2245
of spleen, desoxypentose nucleic acid content of, 6: 5250

Nucleic acids
biosynthesis of, and radioautographic measurement using $P^{32}$, 6: 149
chemical behavior in x-irradiated nerve cells, 6: 6501(J)
complexes with lipoprotein, in treatment of radiation injury, 6: 1963(J)
concentration at various stages of meiosis, as related to radiosensitivity, 6: 1949
concentration in bone marrow and spleen of rats, 6: 2568
degradation of, by whole-body irradiation, 6: 1957(J)
effects of radiation and injected $H_2O_2$ on, in rat intestine, 6: 2558
effects of radiation on, 6: 1595
effects of radiation on, possible biological significance of, 6: 2571(J)
incorporation and retention of $C^{14}$ in, 6: 566
metabolism of, bibliographies on, 6: 566
metabolism of, effects of nitrogen mustard on, 6: 3512
metabolism of, effects of x radiation on, 6: 3168(J)
phosphorus content of, effect of diet and starvation on, 6: 6292(J)
photometric determination in animal cells, 6: 3493(J)
preparation and properties of, from calf thymus gland, 6: 2048
radiosensitivity effects on cancer cells, 6: 3180(J)
synthesis by chick embryos, radiation effects on, 6: 4694(R)
turnover rate of pentose and desoxypentose, in mice, 6: 2288

Nucleic acids, pentose-
biosynthesis of, studied by incorporation of $C^{14}$-labeled formate in rat organs, 6: 2553

Nucleon showers
angular and lateral distribution functions for, 6: 5799(J)
theory of, 6: 753(J)

Nucleons
(See also Neutrons; Protons.)
angular distribution of scattered, in high-energy nuclear collisions, 6: 3702(J)
cascades of, solution of Janossy equation for, 6: 2241(J)
charge-symmetrical interaction between leptons and, 6: 2234(J)
cosine interaction between, 6: 5865(J)
coupling of excited, in nuclear shell model, 6: 6438(J)
coupling of mesons to, experimental tests of charge-symmetry hypothesis in, 6: 3048(J)
coupling of nuclear surface oscillations to motion of, 6: 2742(J)
deuteron scattering cross sections, theory, 6: 1547
Dirac equation for, physical interpretation, 6: 4676
double scattering of pseudoscalar mesons by, 6: 4910(J)
elastic scattering matrix, 6: 1306(J)
inelastic-collision cross sections, correlation with spread of nucleon component of cosmic radiation, 6: 5629(J)
interaction potentials between, higher approximations to, 6: 5860(J)
interaction potentials between, in heavy nuclei, 6: 4213(J)
interactions, 6: 386
interactions according to quantized neutral scalar meson theory with non-linear coupling, 6: 4903(J)
interactions, theory, 6: 747(J)
interactions, unified field theory with varying charge and rest mass, 6: 4995(J)
interactions, use of cosine equation of Peaslee in expressing properties of, 6: 6152
interactions between, in μ-pair theory, 6: 3826(J)
interactions of high-energy, with nuclear-emulsion nuclei, 6: 2764(J)
interactions through pseudoscalar coupled mesons, 6: 6435
interactions with external electromagnetic fields, 6: 1838
interactions with leptons, charge-independence of, 6: 5659(J)
interactions with mesons and photons, 6: 1055(J)
isobaric states, investigation by meson scattering, 6: 5170(J)
magnetic moments, modification by proximity of another nucleon, 6: 6147(J)
magnetic moments, non-additivity in heavy nuclei, 6: 5860
mass difference of, 6: 3141(J)
meson current around, 6: 4603(J)
meson reactions, 6: 3031(J)
meson scattering by, according to classical treatment of charge-symmetric pseudoscalar field, 6: 5649
meson scattering by, theory, 6: 3026(J), 3371(J)

Nucleons (cont'd)
meson scattering by, theory of effective range for P state, 6: 6140(J)
meson scattering cross sections, theory, 6: 3036(J)
π-meson interactions, theory, 6: 6430(J)
momentum distributions in D, C, and O, 6: 5464(J)
nucleon scattering by, theory, 6: 1894(J)
recoil, and electron-neutron interaction, 6: 6676(J)
recoil of, effect on nuclear forces, 6: 748(J)
relativistic n-p interaction with pseudoscalar field, 6: 3831(J)
scalar meson field of, 6: 1825(J)
scattering by α particles, theory, 6: 3428(J)
scattering in high-energy collisions with nuclei, mean-square-angle calculations, 6: 5900(J)
scattering by nuclei, optical model for, 6: 5221(J)
scattering by nucleons, 6: 1052(J)
scattering by nucleons, relativistic effects in, 6: 3058(J)
scattering of polarized, by nucleons, 6: 3432(J)
self energies of, 6: 3035(J)
self energies of, and mass spectra of heavy particles, 6: 2729(J)
structure, model derived from nucleon moments and neutron-electron interaction, 6: 5460
triplet force between like, theory, 6: 3666
wave functions for configurations $j^n$, in j-j coupling theory, 6: 4925
wave functions of, in momentum space, 6: 1936(J)
Nucleosides
determination by nitroprusside reaction, 6: 812
separation, 6: 1072
synthesis in yeasts, 6: 1072
Nucleotides
identification and properties of, from rabbit liver, 6: 2801
separation by ion-exchange chromatography, 6: 1989
Nucleotides, desoxy-
determination in nuclei of spleen cells, 6: 5250
Nucleotides, dihydrodiphosphopyridine
oxidation by x radiation, 6: 506(R)
Nucleotides, pyridine diphosphate-
effects on pyruvate oxidation in mitochondria, 6: 760
metabolism in mitochondria of normal and neoplastic tissues, requirements for, 6: 6239
Nuclides
gamma reactions (γ,αn), 6: 3687
Nutrients
absorption by stems and branches of woody plants, tracer studies, 6: 4717
foliar absorption of urea, tracer studies, 6: 4716
Nylon
(See Plastics.)


## O


Oak Ridge National Lab.
environs monitoring, 6: 4373(R)
progress reports, 6: 1485(R), 4373(R), 5398(R)
progress reports on health physics, 6: 1(R), 3182(R), 3584(R), 6512(R)
progress reports on instrument research and development, 6: 277(R), 3335(R), 3336(R), 5833(R), 6415(R)
progress reports on physics, 6: 3584(R), 6624(R)
radiochemical pilot plant development at, 6: 2633
Oak Ridge National Lab., Y-12 Area
progress reports on preparation of $ZrF_4$, 6: 2617(R), 2640(R)
Oak Ridge School of Reactor Technology
development and curriculum of, lecture on, 6: 1192
laboratory manual for reactor physics course, 6: 6145
Oak Springs Area
geophysical exploration, 6: 5597
2-Octanone
solubility of metallic nitrate hydrates in, 6: 83
1-Octene
deuteration and disproportionation, 6: 2615(J)
2-Octene
deuteration and disproportionation, 6: 2615(J)
Ohmmeters
manual for a high resistor type 1055B (British), 6: 3807
Oil shales
batch retorting of, pilot plant and flowsheets for, 6: 4491
concentration of kerogen in, 6: 3782
Oils
(See also Greases; Lubricants; Vacuum systems.)
convection heating and cooling by horizontal cylinders in, 6: 2364(R)
recovery from Colorado shales, 6: 4491
Old and Barnes, Inc.
progress reports, 6: 403(R)
Oleic acid
effects of radiation on, 6: 4353(R)
Opal (uraniferous)
occurrence in Argentina, 6: 215(J)
Optical systems
(See also instruments using optical systems, e.g., Microscopes.)
design, 6: 4557
fungiproofing with α emitters, 6: 3739
strain effect in objective lenses, used for study of metals under polarized light, 6: 3613
for viewing in irradiated areas, design, 6: 4556
Oregon Univ.
progress reports, 6: 59(R), 1450(R)
Ores
(See also specific ores, e.g., Uranium ores; see also Mineral dressing; Minerals; Radioactive ores.)
colorimetric determination of small amounts of Th in, 6: 5571
mechanical beneficiation, 6: 3294(R)
neutron activation of, for picker-belt separation, 6: 3293(R), 3294(R)
Organic acids
(See also specific organic acids.)
spectrophotometric analysis of mixtures of, 6: 816
Organic compounds
(Specific organic compounds are indexed according to precedents found in such standard reference works as Chemical Abstracts; Handbook of Chemistry and Physics; Index Medicus; Biological Abstracts; etc.)
effects of α, β, γ and x radiation on, bibliography, 6: 6008
effects of γ radiation on, measurement, 6: 145(J)
effects of radiation on, 6: 4004(J)
fluorescence, 6: 4870(R)
isotopic analysis, 6: 104
luminescence in, effects of structure on, 6: 2590(R)
luminescence in, mechanism, 6: 5159(J)
polarographic behavior, 6: 808(R)
polymerization by electrons, 6: 141(J)
proton stopping by, 6: 718
proton stopping by, effect of chemical structure on, 6: 6180
radiodecomposition, explanation of, 6: 6567(J)
radiodecomposition in solution, mechanism for, 6: 5347(J)
spectra of flames of, with fluorine, 6: 2032(J)
spectrographic analysis for inorganic constituents, 6: 158
stopping power of, for 340-Mev protons, 6: 3672
Organic compounds (labeled)
analysis for $C^{14}$ by wet combustion, apparatus for, 6: 1408(J)
chemical analysis and isotopic assay, 6: 1628
specific activity determination, scintillation detector for, 6: 3640(J)
synthesis, bibliography, 6: 5728(J)
synthesis, review of methods, 6: 6340
Organic compounds, metallo-
(See also appropriate subheadings under main headings for compounds of the specific elements; also main headings in the form Pentobarbital, sodium.)
effects of radiation on, 6: 4748(R)
Organic syntheses
(See also Fermentation; Reaction mechanisms (organic).)
bibliographies on use of organo-lithium compounds in, 6: 166
Organs
(See also the specific organs.)
blood volume in, measurement of, 6: 765
ORNL graphite reactor
loading, 6: 2482(J)
Orsellinic acid
synthesis of labeled, 6: 174(J)
Oscillators
(See also Oscillographs; Pulse generators; Radiofrequency oscillators; Reactor oscillators.)
f-m audio, for telemetering systems, 6: 1783
for microwave generation, design, 6: 5430
for radiation measurements, design, 6: 1(R)
Oscillographs
(Including oscilloscopes.)
danger of exposure to x-rays from, 6: 783(J)
design, 6: 1511
for testing electric insulation, 6: 6225(P)
for testing scintillation counters, 6: 5440(J)
Osmium
hyperfine structure, 6: 6158(J)
Osmium isotopes
Szilard-Chalmers concentration, 6: 4017(J)
Osmium isotopes $Os^{185}$
energy levels, from $Re^{185}$ β decay, 6: 5514(J)
Osmium isotopes $Os^{189}$
nuclear spins and moments, 6: 6158(J)
Osmium oxides
crystal structure of $OsO_4$, 6: 6641

Oxalate complexes
with protactinium, stability of, 6: 2002(J)
Oxalic acid
(Common salts are indexed in the form Nickel oxalates.)
decarboxylation of, $C^{13}-C^{14}$ isotope effect in, 6: 832
reduction by Na amalgam, 6: 4025(J)
thermodynamic properties, 6: 560
Oxamide, dithio-
acidity constant and solubility, 6: 1629
Oxamide, dithio- complexes
spectrophotometric analysis, 6: 1653
Oxazoles, 2,5-diaryl-
properties, 6: 4447
synthesis from corresponding N-phenacylamides, 6: 4447
Oxazolones
ultraviolet spectra, 6: 850
Oxidation
(See also as subheading under materials oxidized.)
kinetics in solution, 6: 6529
mechanism of catalytic, of CO, 6: 177(J)
of metals at high temperatures, theory, 6: 2373
radioinduced, 6: 146(J)
Oxidizing agents
(See also specific compounds used as oxidizing agents.)
effects of x radiation on dilute aqueous solutions of, 6: 2329
Oxime complexes
with nickel, magnetic properties and molecular structure, 6: 6007
with nickel, preparation and properties, 6: 5042
Oximes
acidic dissociation constants, 6: 4395
nitration and synthesis, 6: 6579(R)
synthesis of new, by oximation of Na salt of 2-hydroxyiminocyclohexanone, 6: 6014
Oxygen
(See also Ozone.)
adsorption on irradiated and nonirradiated graphite, 6: 6186
consumption by x-irradiated human gastric mucosa, 6: 3909(J)
corrosion of metals by, mechanism of, 6: 3281(J)
determination, bibliography on, 6: 110
determination in Fe by H reduction, 6: 1658(R)
determination in liquid metals, apparatus for, 6: 5601
determination in Na, 6: 4751
determination in Sn, 6: 1137
determination in uranium oxides, 6: 5736
deuteron reactions, survey, 6: 6621(R)
effects of interstitial, on superconductivity of V, 6: 1739(J)
effects of small additions of, on properties of Zr, 6: 2934
effects on crystal structure of Zr, 6: 229(R)
effects on radioreduction of potassium iodate, 6: 5343(J)
effects on radiosensitivity
(See Oxygen effect.)
effects on recovery of broken chromosome ends following irradiation, 6: 1946
electron capture by molecular, probability measurements, 6: 4653(J)
evolution by isolated chloroplasts, 6: 534
excitation potentials and range of $\alpha$ particles in, 6: 4238(J)
fluorescence of, excited by $\alpha$ particles, 6: 2521(J)
high-energy neutron and proton reactions of, 6: 2493(J)
induction of chromosomal aberrations in pollen by, 6: 4
ionization in, by $\mu$ mesons, 6: 1824(J)
isotopic composition of evolved, in catalytic decomposition of $H_2O_2$, 6: 4729(J)
isotopic dilution determination in fluorocarbon derivatives, 6: 5992(J)
isotopic equilibration determination in organic compounds, 6: 2704(J)
isotopic exchange reactions in $O^{16}O^{18}-H_2O^{18}$ solutions, 6: 6565
mesic atoms formed by $\pi^-$ mesons and, x-ray emission of, 6: 5650
microwave spectra, 6: 3383(R)
microwave spectra, line broadening in, 6: 3380(R)
molecular quadrupole moments of, theory, 6: 3383(R)
molecular theory, solution of eigenfunction equations, 6: 6674(R)
neutron and proton charge-exchange reactions in, 6: 1881(J)
neutron total cross sections, 6: 1023(J), 1525
non-exchange between $H_2O$ and some nitrogen compounds, 6: 2855
nuclear momentum distribution in, inferred from proton scattering, 6: 1841
nucleon momentum distributions in, from proton scattering data, 6: 5464(J)
polarographic determination of biochemical demand for, 6: 6542
proton range-energy relation in, 6: 2199
proton range-energy relation in, effect of $O_2$ pressure on, 6: 1339
proton scattering cross sections, 6: 1546
radiosensitivity effects, 6: 6276(J)
reaction of Zr surfaces with, 6: 2378
Oxygen (cont'd)
removal from Zr, 6: 3576(J)
solubility in K and Na-K alloys, 6: 1237
thermal conductivity at low pressure, 6: 6591(J)
thermodynamic properties at zero pressure, 6: 3803
vacuum fusion determination in Mo, Th, Ti, U, V, and Zr, 6: 3254(J)
vacuum fusion determination in Ti, 6: 5803
Oxygen effect
(See also appropriate subheadings under Radiosensitivity.)
on chromosomal aberrations in pollen, 6: 4
on radiation damage in paramecium, 6: 46
on x-ray-induced chromosome breakage in maize, 6: 5942(J)
on x-ray induction of aberrations in chromosomes, 6: 24, 26
Oxygen–hydrogen–potassium systems
phase studies, 6: 5569
Oxygen–hydrogen–sodium systems
phase studies, 6: 5569
Oxygen ions
interaction of electron configurations, 6: 3750(J)
Oxygen–iron–sulfur systems
equilibrium and vapor pressure in, 6: 6609
thermodynamic properties, 6: 3748(R)
Oxygen isotopes
abundance in rocks, 6: 1793
fractionation in $H_2O_2$ reactions, 6: 4473(J)
preparation, properties, and chemical applications, review, 6: 1124(J)
ratio in atmosphere, origin of, 6: 2953(J)
ratio in rocks and meteorites, 6: 1744(J)
Oxygen isotopes $O^{15}$
energy levels, 6: 1535, 3083(J)
energy levels, from $N^{14}$ (d,n), 6: 5674(J)
Oxygen isotopes $O^{16}$
alpha reactions ($\alpha$,p), 6: 1011(J)
deuteron reactions (d,$\alpha$), measurement of ground state Q-values and approximate cross sections and upper limits for, 6: 6454
deuteron reactions (d,$\alpha$), search for $\alpha$ particles indicating excited state in $N^{14}$, 6: 4953(J)
deuteron reactions (d,$\alpha$) and (d,p), 6: 1329(J)
deuteron reactions (d,p), 6: 1869(J)
deuteron reactions (d,p), Q value, 6: 4955(J)
disintegration by $\pi^-$-meson reactions, 6: 2194(J)
energy levels, 6: 3085(J)
energy levels, from proton inelastic scattering, 6: 5495(J)
fast neutron scattering from, 6: 1895(J)
gamma cross sections ($\gamma$,n), 6: 1332(J), 1861
gamma reactions, 6: 2196(J)
gamma reactions ($\gamma$,$\alpha$), cross sections measured by using nuclear emulsions, 6: 4952(J)
gamma reactions ($\gamma$,4$\alpha$), 6: 699
gamma reactions ($\gamma$,4$\alpha$), mechanism of, 6: 6163(J)
gamma reactions ($\gamma$,4$\alpha$), multiple resonances in, 6: 5884(J)
gamma reactions ($\gamma$,n), 6: 963
gamma reactions ($\gamma$,n), cross sections for, 6: 4954(J)
gamma reactions ($\gamma$,n), resonances in, 6: 372(J)
gamma reactions ($\gamma$,p$\alpha$), identification in nuclear emulsions, 6: 4943
magnetic hyperfine structure, 6: 3447
meson reactions ($\pi^-$,p4n) and/or ($\pi^-$,5n), 6: 2183(J)
$\pi^0$ mesons from, by proton reactions, 6: 670
neutron reactions (n,$\alpha$), 6: 1018(J)
neutron reactions (n,$\alpha$), angular distributions, 6: 5882(J)
neutron reactions (n,$\alpha$), (n,p), and (n,d), cross sections, 6: 5882(J)
neutron reactions (n,3$\alpha$2p3n), 6: 6384(J)
neutron scattering by, 6: 2204(J)
neutron scattering cross sections, 6: 1859
nuclear stability, 6: 1314(J)
Oxygen isotopes $O^{17}$
energy levels, 6: 1329(J), 1895(J)
energy levels, from $F^{19}$ (d,$\alpha$), 6: 2752
magnetic hyperfine structure, 6: 3447
mass, calculated from Q value of $O^{18}$ (d,p), 6: 4955(J)
mass, nuclear spin, and relative abundance of, 6: 340(J)
nuclear spin and quadrupole moment, 6: 2476(J), 3394
nuclear spin of ground state and excited state, 6: 1869(J)
properties of energy states of, 6: 1859
Oxygen isotopes $O^{18}$
concentration by exchange between $CO_2$ and $H_2O$, reflux column data, 6: 6112(J)
enrichment of $CO_2$ in, by ionic hydration in aqueous solution, 6: 5822(J)
photodisintegration cross section, 6: 3685
proton reactions (p,n), excitation functions for, 6: 1021(J)
Oxygen–titanium systems
(See also Titanium oxides.)
lattice parameters of $\alpha$ and TiO phases, 6: 6069

Oxygen–zirconium systems
(See also Zirconium oxides.)
phase studies, 6: 5379(R)
preparation, and physical and mechanical properties, 6: 2929
Ozone
microwave spectra, 6: 3380(R)

P

Packing fraction
(See as subheading under specific isotopes.)
Paint
preparation for high temperature use, 6: 885
Pair production
(See as subheading under specific isotopes; see Ion pair production.)
Paleotemperatures
mass spectrographic determination, 6: 1793
Palladium
nuclear magnetic resonance of H absorbed into wires of, 6: 4624(J)
separation of small amounts of $Ag^{111}$ from, 6: 3543(J)
spectra of, isotope shift in, 6: 693(J)
tensile properties, 6: 2930
x-ray spectra, 6: 97(J)
wettability by sodium silicates, 6: 4780
Palladium alloys
magnetic properties of, with Cu, Ag, Au, Al, Sn, Pb, and Sb, 6: 5304(J)
Palladium–hydrogen systems
effect of pressure on solubility of molecular $H_2$ in $\beta$ phase, 6: 6336(J)
magnetic properties, 6: 5304(J)
Palladium isotopes
hyperfine structure in Pd I spectrum, 6: 6442(J)
isomeric transition, 6: 409
isomers, production and properties, 6: 4271(J)
Szilard-Chalmers concentration, 6: 4017(J)
Palladium isotopes $Pd^{103}$
radiations from, coincidence study of, 6: 2159(J)
Palladium isotopes $Pd^{104}$
mass, 6: 2989
Palladium isotopes $Pd^{105}$
energy levels, from $Rh^{105}$ decay, 6: 4283(J)
nuclear spin and magnetic moments, 6: 693(J), 6442(J)
Palladium isotopes $Pd^{106}$
angular correlation of $\gamma$ rays from, 6: 5474(R)
angular correlation of $\gamma$ rays from, and spin of 1.55-Mev level, 6: 4217(J)
Palladium isotopes $Pd^{108}$
half lives of, for double $\beta$ decay, 6: 2779
half lives of, upper limit for, 6: 2781(J)
mass, 6: 2989
Palladium isotopes $Pd^{109}$
as multicurie $\beta$ source, 6: 6477
radioactivity, 6: 3111(J)
Palladium isotopes $Pd^{110}$
half lives of, for double $\beta$ decay, 6: 2779
half lives of, upper limit for, 6: 2781(J)
Palladium isotopes $Pd^{111}$
neutron capture cross sections, 6: 1628
Palladium–rhodium alloys
adsorption of $H_2$ by dispersed, in aqueous KOH, $H_2SO_4$, and HBr, 6: 6337(J)
Palladium–silver couples
porosity of, metallographic studies on, 6: 1474
Palmer Physical Lab., Princeton Univ.
progress reports, 6: 4581(R)
Palmitic acid
oxidation in rat tissues, 6: 792
Pancreas
concentration of Mn in, tracer studies, 6: 3947(J)
cystic fibrosis of, effects on protein metabolism in children, 6: 6293
effects on protein metabolism in health and in diagnosis of pancreatic insufficiency, 6: 6524
electrolyte secretion in, 6: 3884
physiology of, bibliography on, 6: 3884
secretion from, decrease following x irradiation, 6: 3904(J)
Paper
technology, tracer application to, 6: 5092(J)
Paper chromatography
(See Chromatography.)
Paraffin
(For compounds in the paraffin series see Alkanes and the specific compounds.)
$\pi$-meson interaction cross sections, at very high energies, 6: 5405
neutron absorption by, 6: 3103(J)
neutron diffusion length in, 6: 4155(J)
penetrating cosmic showers originating in, multiplicity of, 6: 4824(J)
Parallel plate detectors
for cosmic-ray measurements, design, 6: 2154(J)
as low-energy velocity selectors, design, 6: 3015(R)
Paramagnetic salts
adsorption on charcoal and silica gel, 6: 4020
degeneracy of energy states of ions of, 6: 2682(J)
for low temperatures, review of properties of, 6: 921(J)
microwave spectra tables for 100, 6: 3383(R)
nuclear alignment in, 6: 2472(J)
relaxation of, size and thermal conductivity effects in, 6: 608(J)
Paramecium
effects of diethanolamine salt of maleic hydrazide on, 6: 763
effects of electromagnetic radiations on mating reaction, 6: 6241
effects of nitrogen mustard on cell division in, 6: 1108
effects of radiation on, chemical modification of, 6: 46
effects of x radiation and nitrogen mustards on, 6: 506(R)
effects of x radiation on, chemical modification of, 6: 48
effects of x radiation on, role of hydrogen peroxide, 6: 3892, 6248(J)
inheritance of reduced vigor in, 6: 140
radiosensitivity of, effects of medium on, 6: 2565
radiosensitivity of mating reaction in, 6: 2565
Parasympathomimetic substances
(See Vagomimetic substances.)
Parathion
synthesis of $P^{32}$-labeled, and metabolism in insect body, 6: 6016(J)
Particle collectors
(See also Electrostatic precipitators; Filters; Thermal precipitators.)
impaction efficiency, 6: 1708
particle size efficiency studies on Design 2 Aerotec tube, 6: 6562
Particle tracks
(See also appropriate subheadings under incident radiations; see also Photographic film detectors; Photographic films.)
determination of momentum-velocity product from multiple-scattering measurements in film, 6: 5905(J)
production by ionizing particles in nuclear emulsions, 6: 3011(J)
Particle trajectories
contorted, construction in magnetic fields with a plane of symmetry, 6: 6642(J)
in magnetic and electric fields, 6: 3696(J)
mathematical analysis of, in an axial focusing double lens spectrometer, 6: 1795(J)
mathematical analysis of, in cyclotrons, 6: 378
simulation of, in magnetic fields, 6: 2501(J)
Particles
(See also headings by name of materials, e.g., Nickel powders; see also Aerosols; Dusts; Elementary particles; Nuclear particles; Powders; V particles.)
diffusion in the lower layers of the atmosphere, 6: 3041(R)
Dirac, unitary transformation of Hamiltonian, 6: 292
erosive effects on bends in circular conduits, 6: 185
extinction coefficient and size of, relation between, 6: 919(J)
multiple scattering of charged, theory, 6: 2512(J), 4245(J)
rate and efficiency of clearance of inhaled, by respiratory tract, 6: 3158
sedimentation from concentrated suspensions and surface area of, 6: 3582
size determination by small-angle x-ray scattering, 6: 4092(J)
size measurement, by x-ray scattering, 6: 782
size measurement, in monodisperse radioactive gold sols, 6: 6302(J)
spacial size measurement, by "line-area" method, 6: 1463
Pegmatites
occurrence in Cashiers and Zirconia District, North Carolina, 6: 4496
Penicillin
biosynthesis of $C^{14}$- or $S^{35}$-labeled, 6: 5975(J)
biosynthesis of labeled, 6: 5076(J)
inactivation of dry, by deuteron bombardment, 6: 6263(J)
radiometric measurements of $S^{35}$-labeled, in solution, 6: 3953(J)
uptake by bacteria and fate of orally administered and injected, tracer studies, 6: 5975(J)
Pennsylvania State Coll.
progress reports, 6: 808(R), 3781(R)
Pennsylvania State Coll., School of Mineral Industries
progress reports, 6: 116
Pennsylvania Univ.
progress reports, 6: 4800(R)
Pentamethylenetetrazole
(See Metrazole.)
Pentane, dodecafluoro-
molecular dipole moments, 6: 131(J)
physical properties, 6: 5327
Pentane, dodecafluoro- –tungsten fluoride systems
thermodynamic properties, 6: 5328
Pentane, 2-methyl-
synthesis of D-labeled, and mass spectrography of, 6: 5059(J)

**Pentane, 2,2,4-trimethyl-**
effect of I in radiolysis of, 6: 1674
**2,4-Pentanedione**
chelate compound formation constants of, with metal ions, 6: 6299
infrared and Raman spectra and structure of, 6: 2882(J)
**1-Pentene**
deuteration and disproportionation, 6: 2615(J)
**Pentobarbital sodium**
physiological effects on bone marrow and spleen, 6: 2568
protective action against x radiation, 6: 1386(J)
radiosensitivity effects, 6: 1959(J)
**Pentoses**
determination by nitroprusside reactions, 6: 812
ion exchange separation, 6: 148
**Pentrameters**
for measuring sensitivity of radiographic inspection, design and performance, 6: 6661
**Peptides**
chromatographic determination in normal and x-irradiated egg yolks, 6: 508
hydrolysis by enzymes, 6: 150
infrared spectra in $D_2O$ solution, 6: 4743(J)
synthesis of modified, from aldonic acid, 6: 162
**Perchlorate ions**
molecular orbital calculations for, 6: 4179(R)
**Perchloric acid**
spectrographic analysis of, resistant electrodes for, 6: 2638(J)
**Percolators**
for multisolute systems, theory of design and efficiency, 6: 5815
**Periodic systems**
(See also isotopes of the elements; also groups of elements, e.g., Transuranic elements.)
based on electronic structure of atoms, 6: 114(J)
charts, 6: 3239(J), 4737(J)
of isotopes, giving nuclear magnetic moments, 6: 3402(J)
mathematical analysis, 6: 2020(J)
nuclear periodicity of Mendeleev-type, 6: 4564(J)
position of actinides in, 6: 3240(J)
of stable isotopes, 6: 6108(J)
theoretical limits to, 6: 2174(J)
**Permanganates**
reduction by $MnO_2$, 6: 3514
**Permeability**
(See also as subheading under materials being permeated; see also Diffusion; Magnetism.)
measurement of, for liquids and solids in the frequency range 3 cps to $5 \times 10^{11}$ cps, 6: 3297
**Perovskite**
compounds with structural type of, 6: 5322(R)
**Peroxides, perhaloacetyl**
preparation, 6: 1567(P)
storage, 6: 1568(P)
**Perrhenates**
electrolytic reduction in perchloric, ethanesulfonic, and trifluoroacetic acids and HCl, 6: 4726
electrolytic reduction in $H_2SO_4$, 6: 4725
**Pertechnetates**
absorption spectra, 6: 1397(J)
**Perturbation theory**
(See also subheading perturbation under reactors.)
applied to solid-state and molecular theory, 6: 2166(R)
configuration space methods in, 6: 2233(J)
detailed balancing as result of time-dependent, 6: 5858
non-relativistic, for the two-body scattering with non-central forces, 6: 2543(J)
quantum mechanical, note on, 6: 1895
relativistic, for the two-body scattering with non-central forces, 6: 2544(J)
scattering amplitude calculation for two-body problem, 6: 6184(J)
**Pharmaceuticals**
(See also Drugs.)
in modification of lethal effects of radiation, 6: 6515
sterilization by $\gamma$ radiation, 6: 5935
**Phase studies**
(See also as subheading under specific materials; see also Diffusion; Solutions.)
apparatus for rapid determination of liquid-liquid and liquid-solid equilibria, 6: 5731
solid-solubility determination by strain-aging technique, 6: 5375
**Phenocopies**
production in Aerobacter aerogenes by ultraviolet radiation, 6: 3890
**Phenol**
effects of x rays, neutrons, and $\gamma$ rays on aqueous, 6: 2045(J)
**Phenol (cont'd)**
photosynthesis, using $\gamma$ radiation from $Co^{60}$ source, 6: 5353
**Phenol, 2,4-dinitro-**
effects on turnover of acid-soluble P of rat diaphragm, 6: 2285
**Phenol, 2,2'-methylenebis[3,4,6-trichloro-]**
synthesis of $C^{14}$-labeled, in methylene bridge, 6: 4449(J)
**Phenol–sulfuric acid systems**
diffusion in, 6: 804
**Phenolphthalein, tetraiodo-**
therapeutic use of $I^{131}$-labeled, for carcinomas of liver and bile duct, 6: 4378(J)
**Phenols**
volumetric determination in nonaqueous solvents, 6: 3753
**Phosgene**
infrared and Raman spectra, 6: 6204(J)
**Phosphatase activity**
alkaline, in Be poisoning, 6: 1616
alkaline, mechanism of, 6: 2802
effects of radiation on, 6: 4353(R)
effects of radiation on, studies on ground squirrels, 6: 4352(R)
**Phosphatases**
biosynthesis by lily anthers, 6: 3
effects on calcification of bone, 6: 21(J)
**Phosphate deposits**
occurrence, 6: 5599
**Phosphate deposits (Morocco)**
uranium occurrence in, 6: 2858(J), 2922(J)
**Phosphate deposits (North Africa)**
uranium content, 6: 2860(J)
**Phosphate deposits (uraniferous)**
exploration in Morocco, 6: 1461(J)
**Phosphate rock**
(See also Phosphates.)
processing for recovery of P and V, 6: 1727
**Phosphate slimes**
mechanical beneficiation of U-bearing fractions, 6: 5302
**Phosphates**
(See also Metaphosphates.)
chromatographic separation, 6: 4439
as corrosion inhibitors, 6: 6042(J), 6043(J)
as corrosion inhibitors for steel, 6: 6041(J)
distribution of, effects of alloxan diabetes on, 6: 3203
formation of pyrophosphates in Szilard-Chalmers reactions on solid, 6: 2887(J)
metabolism in human erythrocytes, 6: 4719
neutron bombardment of, forms of P resulting from, 6: 2626(J), 3238(J)
organic, catalytic effects of molybdate on hydrolysis of, 6: 5987
transport in erythrocytes, role of ATP in, 6: 4720
**Phosphatides**
biosynthesis by rats, 6: 798(J)
incorporation of phosphate into, by liver slices, 6: 799(J)
**Phosphatides, acetal**
effects on radiosensitivity of tissues, 6: 6506(J)
**Phosphine**
isotopic exchange reactions, 6: 3516
mass-spectrometric ionization, dissociation, and critical potential, 6: 5145(J)
preparation, 6: 3516
vibrational frequencies of $PH_2D$ and $PHD_2$, 6: 6144
**Phosphinic acid, ethyl-(p-hydroxyphenyl)-**
preparation, 6: 93
**Phosphinic acid, ethyl-(p-toluenesulfonyloxyphenyl)-**
preparation, 6: 93
**Phosphorescence**
(See also as subheading under specific materials; see also Fluorescence; Luminescence; Phosphors.)
induced by $\alpha$ particles or $\gamma$-radiation, 6: 653(R)
quantum-mechanical theory of, 6: 1383(J)
**Phosphoric acid**
corrosive effects on stainless steel, Fe, and Cr-Fe alloys, 6: 5103(J)
ion-exchange separation of V from, 6: 5070(J)
**Phosphorous acid, aryl esters**
reactions with I, 6: 5561
**Phosphors**
(See also specific phosphorescent compounds; see also Luminescence; Phosphorescence; Scintillation detectors.)
activation analysis for Cu, 6: 3970(J)
alpha-induced scintillation in terphenyl-xylene, mechanism, 6: 4749(J)
application to detection of infrared radiation, 6: 1510
crystalline, review of physics of, 6: 4888(J)
decay times, fluorescent efficiencies, and energy storage, under $\gamma$ or $\alpha$ excitation, 6: 5156(J)
effects of $\alpha$ and $\gamma$ rays on conductivity and fluorescence of, 6: 1393(R)

Phosphors (cont'd)
effects of radiation on, 6: 4870(R)
efficiency in counting fast neutrons and γ radiation, 6: 4577
efficiency of organic, for γ-ray detection, 6: 2719(J)
efficiency of scintillation, 6: 3387(R)
emission spectra of Eu in alkaline earth oxide and sulfide, 6: 2338(J)
fluorescence and phosphorescence in various inorganic, induced by γ rays, 6: 1749(R)
fluorescent, saturation effect of, 6: 6425(J)
G-M tubes using, response as function of source position, 6: 5165(J)
induced conductivity and light emission in, 6: 5155(J)
ionization potential of rare earth ions in alkaline earth, 6: 2333(J)
lithium salts, for neutron detection, 6: 5843(J)
long-lived phosphorescence of NaI-TlI, 6: 2434
low energy β counting with 2,5-diphenyloxazole in toluene, 6: 4576
luminescence, 6: 1506(R)
luminescence of alkaline iodides, temperature effects on, 6: 6125(J)
luminescence spectra of x-ray-activated KCl(Ni) and KCl(Cu), 6: 3633(J)
luminescence spectra of x-ray-activated ZnS, 6: 3634(J)
optics of polished, 6: 5399(R)
packaging for scintillation spectrometry, 6: 2431
performance, 6: 4870(R)
plastic, molding of, 6: 4874(J)
plastic, preparation and efficiency of, 6: 5639(R)
plastic, preparation and testing of, 6: 2974(R), 5835(J)
plastic, saturation effect of, 6: 6424(J)
preparation and testing, for use in scintillation detectors, 6: 5428
preparation of uniform, non-hydrogenous ZnS, 6: 3353
preparation, properties, and scintillation process in solid and liquid, 6: 5152(J)
properties, 6: 59(R)
properties, for use in large scintillation counters, 6: 5439(J)
purification and growth of crystalline, 6: 6414
radioinduced electric conductivity, 6: 1749(R)
response, instrument for testing, 6: 5428
response of LiI, $Li_2SnO_3$, and NaI to neutrons, 6: 5833(R)
response of organic, in dose measurements, 6: 6668(J)
scintillation efficiency of, in polystyrene solid solutions, 6: 1509
scintillation mechanism in organic, 6: 5226(J)
scintillation properties of p-terphenyl and tetraphenylbutadiene in polystyrene, 6: 6422(J)
self-absorption in terphenyl-xylene solutions, 6: 4693(R)
spectra, theory, 6: 5240
symposium on, digests of papers, 6: 5163(J)
synthesis of 2,5-diaryloxazoles, 6: 4447
synthesis, properties, and response of, 6: 2410
system for measurement of scintillation decay times, 6: 5639(R)
techniques in using, for x-radiation detection, 6: 403(R)
temperature effects on, and energy transfer mechanisms in, 6: 5158(J)
transfer and transport of energy in sensitized solid, 6: 6126(J)
transmission spectra of various crystals and solutions, 6: 3335
x-ray dosimetry with solid, 6: 5153(J)
Phosphors (liquid)
energy response, 6: 4581(R)
neutron and γ counting efficiency, 6: 2133
transfer mechanism in, 6: 4581(R)
Phosphorus
atomic weight, 6: 3972(J)
bone deposition of, effects of animal age on, 6: 3205
determination of organic, in blood, 6: 5988
deuteron reactions (d,n), 6: 3387(R)
distribution in bones of growing pigs, 6: 2842(J)
distribution in long bones of rabbits, 6: 3209(J)
fecal excretion in young calf, 6: 4383
incorporation into lipides of liver slices, 6: 799(J)
incorporation into nucleic acids, effect of diet and starvation on, 6: 6292
metabolism in bone marrow and spleen, 6: 2568
metabolism in liver, mathematical treatment of tracer experiments on, 6: 5039(J)
metabolism in maize, field study using $P^{32}$, 6: 2843(J)
metabolism in mouse mammary tumors, 6: 2841(J)
metabolism in rat diaphragm, effects of 2,4-dinitrophenol on, 6: 2285
plant metabolism of, effect of stunting agents on, 6: 530
radioluminescence of, nature of nonradiative processes in, 6: 4894(J)
ratio of, to C in photosynthesis intermediates, 6: 168
recovery from phosphate rock, 6: 1727
spectrographic determination in organic solids, 6: 158
tissue distribution in Drosophila, 6: 1595
tissue distribution in pigs, 6: 796(J)
tissue distribution in sheep, tracer study with $P^{32}$, 6: 4384
tissue distribution in young calves, 6: 4382
uptake by erythrocytes, 6: 790
Phosphorus (cont'd)
uptake by ribonucleotides in liver-cell fractions, 6: 112(J)
Phosphorus (liquid)
solubility of water in, 6: 2298
Phosphorus(V) chlorides
isotopic exchange reactions with $Cl_2$, 6: 2596(R)
Phosphorus coatings
on a mirror surface, 6: 1304(R)
Phosphorus compounds
biological behavior, 6: 3737
of bone, radiation effects on, 6: 4691(R)
microwave spectra and molecular structures, 6: 3379(R)
Phosphorus–iron–magnesium systems
corrosion of, effect of composition and heat-treatment on, 6: 228(R)
Phosphorus isotopes
energy levels, from (d,n) reactions on Si, 6: 2187(J)
mass defect, 6: 1553
toxicology in rats, 6: 3939(J)
Phosphorus isotopes $P^{31}$
deuteron reactions (d,α) and (d,p) and proton reactions (p,α), energy of, 6: 2185(J)
deuteron reactions (d,n), neutron spectrum, 6: 6171(J)
deuteron reactions (d,p), angular distributions, 6: 5673(J)
deuteron reactions (d,p), excited states of $P^{32}$ from, 6: 4228(J)
gamma reactions (γ,n), 6: 1871(J)
gyromagnetic ratio, 6: 3059(J)
mass difference $P^{31}$–$Si^{31}$, 6: 4259(J)
neutron activation cross sections, 6: 2168
proton reactions (p,α), 6: 1533
Phosphorus isotopes $P^{32}$
adsorption and assimilation by bacterial slimes, 6: 789(R)
application to soils research and plant nutrition, bibliography, 6: 5728(J)
beta decay, 6: 2227(J), 3106
β-particle dosages from, in Drosophila, 6: 5937
beta particles from, interaction with matter, 6: 5491(J)
beta particles from, range of, 6: 4373(R)
beta spectra, 6: 954(R)
blackening of photographic plates by β particles from, 6: 1287
bremsstrahlung emission in β decay, energy and angular correlation, 6: 6709
bremsstrahlung from, angular correlation and intensity of, 6: 1047(J)
concentration in hospital wastes, 6: 519(J)
decay of, presence of positive particles in, 6: 2226(J)
decay schemes, 6: 3122(J)
determination in plants, 6: 968(J)
disintegration of, average β energy per, 6: 3439(J)
effects of radiation from, on cell division in root meristem, 6: 6252(J)
energy levels, from $P^{31}$ (d,p), 6: 4228(J)
excretion by patients with leukemia, polycythemia, and lymphosarcoma, 6: 3192(J)
forms of, in neutron-bombarded calcium phosphates, 6: 2626(J)
internal radiotherapy with, review, 6: 3930(J)
isotopic exchange reactions with organic P compounds, 6: 802
localization in soft tissues, 6: 3499(J)
measurement of blood circulation with, 6: 5974(J)
motion-picture film on use in agricultural research, 6: 5294(J)
mutagenic effectiveness in Drosophila, 6: 5939
neutrino emission from, 6: 1909
photon emission by, possibility of, 6: 2538(J)
physiological effects on epidermal cells, 6: 797(J)
preparation of intense sources of, 6: 633(J)
preparation of spores of B. subtilis labeled with, 6: 6296(J)
radiation from, 6: 3364(J)
radioautographic uses, 6: 795(J)
removal from water supplies, 6: 515
self-absorption of β particles of, 6: 2209(J)
solvent extraction from pile-irradiated S, 6: 2635
in treatment of Hodgkin's disease, 6: 3506(J)
in treatment of malignant melanomas, 6: 5554(J)
in treatment of mycosis fungoides, 6: 2832(J)
in treatment of polycythemia, 6: 3505
treatment of polycythemia vera by, development of acute leukemia following, 6: 6521(J)
tissue distribution and dosage determinations of intravenously administered, 6: 3195(J)
tissue distribution of colloidal $P^{32}$ chromate, 6: 3192(J)
Phosphorus isotopes $P^{33}$
beta spectra and half life, 6: 4983(R)
Phosphoryl fluorides
microwave spectra and structure, 6: 1165
Phosphoryl halide complexes
decomposition under reduced pressure, 6: 2342

Photochemistry
(See also photochemical reactions as subheading under specific materials; see also Photosynthesis.)
of cycloparaffins sensitized by Hg, 6: 2858
energy exchange processes involving, 6: 2861
Photoconductivity
(See as subheading under specific materials.)
Photoelectric cells
(See also Crystal detectors; Photomultiplier tubes.)
for photoconductivity measurements, design, 6: 6412
Photofission products
angular distribution, 6: 1393(R)
Photographic emulsions
(See also Nuclear emulsions; Photographic film; Photographic film detectors.)
fading of latent image produced by $\alpha$ particles, influence of various factors on, 6: 4147(J)
grain density in tracks of electrons moving at relativistic velocities in, 6: 4149(J)
Photographic film
(See also Nuclear emulsions; Particle tracks.)
in angular distribution measurements, 6: 1292(J)
application to $\beta$ spectra measurements, 6: 1560(J)
dental, for x-ray dosage measurements, 6: 1613(J)
effects of electrons on, 6: 3535(J)
effects of radiation on, 6: 3812
effects of x rays and light on, 6: 1681(J)
effects of x rays on, 6: 730(J)
electron dosage determinations by, 6: 3639(J)
fading of latent images produced by protons and $\alpha$ particles in, 6: 838(J)
neutron and proton charge-exchange reactions in, 6: 1881(J)
in observation and identification of electromagnetic processes occurring in soft component of cosmic radiation, 6: 1765(J)
preparation of, for study of radioactive minerals, 6: 3638(J)
primary specific ionization in, at high energy, 6: 4832(J)
radiation sensitivity, calibration, and fogging of, 6: 295
response to $\beta$ particles of graded maximum energies, 6: 964(J)
sensitivity of, in monitoring for fast neutrons, 6: 2268
sensitivity of, for x-ray-diffraction studies, 6: 971(J)
Photographic film detectors
(See also Nuclear emulsions.)
for detecting $\gamma$ radiation from Ra on hands, 6: 1960(J)
in determining U and Th contents of radioactive ores, 6: 3366(J)
limitations, 6: 4584(J)
plastic tape holder for, design of, 6: 2711
with polyvinyl chloride films, 6: 660(J)
radiation monitoring with, error reduction, 6: 6514(J)
reading by neutron activation of $Ag^{109}$, 6: 5734, 6407
in x-ray therapy, 6: 3006(J)
Photography
(See also Cameras; Photographic film; Photomicrography; Spark shadowgraph photography.)
in determination of free surface properties of explosive-driven metal plates, 6: 4520
Photometers
polarization, accuracy of, 6: 630(J)
Photometry
6: 4724(R)
applied to determining ionization produced by a charged particle in passing through nuclear emulsions, 6: 2718(J)
Photomicrography
(See also Microscopy.)
techniques in observing tissue culture, 6: 797(J)
Photomultiplier tubes
adjustment of electrode voltage distribution and effect of longitudinal magnetic field on performance, 6: 5833(R)
after-pulsing phenomena in, 6: 2436, 2694(R), 6663
characteristics of, for use in large-area liquid scintillation counters, 6: 5439(J)
circuit for, design, 6: 4313(P)
design, 6: 3818(R), 5830(R)
design and operating characteristics, 6: 936(R)
design and performance, 6: 2107
design and testing, 6: 4558(R)
in determining probability distribution of the number of secondary electrons, 6: 3340
effects of fatigue in, on scintillation counting results, 6: 665(J)
effects of magnetic field on, 6: 5399(R)
for high-resolution counting systems, performance, 6: 5435(J)
mixing circuits for, 6: 3106
non-linear amplification in E.M.I. Research Lab. type, 6: 4127(J)
performance, 6: 278(R)
Photomultiplier tubes (cont'd)
photocathode, for $\gamma$ spectrometers, 6: 6396(R)
pulse height resolution and photosensitivity of, 6: 2430
pulsed, design of, 6: 3338(R)
resolving power in NaI scintillation detector for $\gamma$ rays, 6: 6415(R)
satellite pulses from, 6: 2143(J), 4581(R)
spurious pulses from type 5819, 6: 1492
stabilization circuit for, 6: 5137(J), 6106
symposium on, digests of papers, 6: 5163(J)
testing of type 5819, 6: 5421(J)
types 4646 and H-5037, design and application, 6: 5844(J)
voltage distribution on electrodes of, 6: 5399(R)
Photon showers
in lead, Monte Carlo study, 6: 3816(J)
Photoneutrons
angular distribution, 6: 2585
detection and measurement, 6: 5877
effect of $\gamma$ energy on yield of, 6: 1538
excitation function for production of, 6: 4946
production, excitation functions from 13.5 to 70 Mev, 6: 6433
production, excitation functions from 80 to 320 Mev, 6: 5877
production, thresholds for, 6: 706(J)
production of monoenergetic, using Be or D, 6: 1829
yields of, analysis in terms of multiplicity of neutron production, 6: 2495(J)
yields of, from Si and Mg isotopes, 6: 1874(J)
Photons
(See also Gamma radiation; X radiation.)
attenuation of, theory, 6: 5685
charge and mass in unified field theory, 6: 4995(J)
Compton scattering of, radiative corrections to, 6: 2205(J)
in cosmic radiation, absorption by various materials, 6: 258(J)
fields of, $\beta$-matrices for, 6: 4574(J)
interactions with mesons and nucleons, 6: 1055(J)
mass, and Riesz potential in electrodynamics, 6: 5708(J)
nuclear reactions, absorption, and neutron production, 6: 5877
nuclear reactions ($\gamma$,p) and ($\gamma$,n), in $Al^{27}$ and $Mg^{24}$, $Mg^{25}$, $Mg^{26}$, 6: 1876(J)
production from proton bombardment of C and other nuclei, 6: 4594
production of electron-positron pairs by, cross sections for, 6: 5685
proton interactions, $\pi^0$ meson production by, 6: 6620(R)
scattering theory, 6: 5685
scattering by nuclei, 6: 728(J)
soft, accompanying $\pi$-$\mu$ decay, 6: 2164(J)
transmission through finite slabs, 6: 5662
Photoperiodism
(See also Light; see also specific plants.)
in red kidney bean, 6: 4692(R)
in Xanthium, 6: 4692(R)
Photosynthesis
(See also Photochemistry.)
bibliographies, 6: 3260
carbon in, path of, 6: 167
dark reactions following, in soybean leaves, 6: 5535
electron-transfer reactions in, mechanism of, 6: 6529
energy transfer methods in, 6: 567
inorganic ions as inhibitors of photochemical activity of isolated chloroplasts in, 6: 2886(R)
malic acid in, relationship of light intensity to, 6: 2290
oxidation–reduction potentials in, 6: 540
pH effects on, 6: 531
quantitative studies of, 6: 498
recent experimental work on, review, 6: 3260
relation to respiration, 6: 75(J)
steady state, kinetic relationships of the intermediates in, 6: 2580
tracer applications in, 6: 6536
Photosynthetic products
biosynthesis and degradation of, in sunflower leaves, 6: 2290
chromatographic analysis, 6: 167
metabolism of malic acid, glyceric acid, and sedoheptulose phosphate, 6: 5535
phosphorus-carbon ratios in, 6: 168
radioautographic analysis, 6: 167
Phthalamide
nitrogen isotope effect in deammonation of, 6: 2600(J)
Phthalic acid, dibutyl ester
atomization, 6: 1439
Phthalic anhydride
polarographic behavior, 6: 806
Phthalic anhydride, iodo-
polarographic behavior, 6: 806
Phthalocyanines
metal complexes, Szilard-Chalmers reactions in, 6: 4017(J)

Phycocyanin
occurrence in blue-green algae, 6: 14
Physics
(See also Mathematics.)
Atomic Energy Commission research programs in, 6: 1487
Physostigmine
effects on concentration of K in erythrocytes, 6: 791
Picoline
electron energy levels of, 6: 1769
2-Picoline
acylation to ketones, 6: 6580
Picolines
acylation reactions with phenyl lithium intermediate, 6: 6300(R)
Pigs
(See Swine.)
Piles
(See Reactors.)
Pions
(See Mesons(π).)
Pipe joints
glass sleeve, for coupling components in high-vacuum system, 6: 5771
Pipes
(Generally thick walled, large diameter; see also Tubes.)
clamp for extraction of vertical, from inaccessible locations, 6: 1571(P)
Pipettes
automatic aliquot, design, 6: 4433
for radioactive solutions, design, 6: 3760(J)
remote-control arrangement for, 6: 5064(J)
Pitchblende
occurrence at Caribou Mine, Boulder County, Colorado, 6: 213
Pitchblende ores
age estimations of, in Belgian Congo, 6: 220(J), 221(J)
chemical analysis for U(IV) and U(VI), 6: 4498(J)
diagnostic associates in Morocco, 6: 1460(J)
occurrence in Belgian Congo, 6: 222(J)
x-ray diffraction analysis before and after heat-treatment, 6: 4498(J)
Pittsburgh Univ.
progress reports, 6: 91(R), 2348(R)
progress reports on crystallographic characteristics of Cd-rich Mg–Cd alloys between 25 and 300°C, 6: 235(R)
progress reports on heat capacity and entropy of Mg, 6: 6623(R)
progress reports on organic synthesis, 6: 6300(R)
progress reports on thermodynamic properties of MgCd, 6: 1472(R)
progress reports on thermodynamics of crystalline solutions, 6: 3298(R), 4796(R)
Pituitary gland
effects of radiation on hormone production by, 6: 31
effects of whole-body irradiation on activity, 6: 5012(J), 5014(J)
effects of whole-body irradiation on anterior function, in swine, 6: 5940(R)
neoplasms of, induced by $I^{131}$, 6: 776(J)
tumors of, effects of radiation thyroidectomy on induction in mice, 6: 6249(J)
tumors of, induced by $I^{131}$ treatment, 6: 3498(J)
tumors of, resulting from radiothyroidectomy followed by whole-body x irradiation, 6: 5938
Placental tissues
radiosensitivity effects of mashed, 6: 763
in treatment of ulcerated radiodermatitis of mucha, 6: 2822(J)
Plankton
(See also Algae.)
radioactivity of, in Columbia River, 6: 513
Plant cells
alpha dosimetry in single, with scintillation counters, 6: 293
determination of sensitive volume by irradiation and ionization density, 6: 2261(J)
effects of radiation on, 6: 6500(J)
effects of radiation on, review, 6: 4359(J)
inactivation by ultraviolet radiation, 6: 4356
metabolism in, relationship of surface structure to, 6: 2282(J)
metabolism in, rate of endogenous respiration as affected by oxidation of exogenous substrates in, 6: 3941
Plant diseases
effects of radiation on crown gall suppression, 6: 5284
radiotherapy in control of tomato wilt, 6: 5285
Plant metabolism
(See also as subheading under specific materials.)
of calcium factors affecting accumulation ratio, 6: 1980
effects of radiation on oxidative, in bacteria, 6: 1595
of foliar applied urea, tracer studies, 6: 4716
of glucose and fructose in canna leaves, tracer study, 6: 6523
of malic acid, glyceric acid and sedoheptulose phosphate in soybean leaves, effect of dark reactions on, 6: 5535
Plant metabolism (cont'd)
uranium inhibition of, kinetics and temperature characteristics of, 6: 2282(J)
Plants
(See also specific plants by name.)
absorption of nutrients by stems and branches of woody, tracer studies, 6: 4717
analysis for Ca, Ba, and Sr by flame photometry, 6: 3752
atomic-energy applications in research on, 6: 2243(J)
biochemical effects of growth regulators on, 6: 1592
carbon dioxide metabolism by, as studied in barley roots, 6: 1703
chemical analysis of extracts of, by ion exchange, 6: 101
cytological, genetic, and morphological effects of chronic irradiation on growing, 6: 5009
effects of atomic bomb explosions on, 6: 3159
effects of Be on growth of, 6: 3200(J)
effects of chronic γ radiation on histology of, 6: 1595
effects of Ra radiation on growth, 6: 3902(J)
effects of radiation on growth studies with fertilizer containing $P^{32}$, 6: 4364(J)
fractionation of carbon isotopes in, 6: 3815(J)
morphology of asynaptic sterile senna produced by atomic explosions, 6: 6268(J)
nutrition, bibliography on tracer studies, 6: 5726
pathological effects of γ radiation on, 6: 5936
phosphorus distribution in, effects of stunting agents on, 6: 530
radioassay of living, apparatus for, 6: 5164(J)
radioinduced histological changes in, 6: 3164(J)
radiosensitivity of crown galls in tomato and kalanchoe, 6: 5284
radiosensitivity of tomato, 6: 5285
radium uptake and storage, 6: 3886(J)
relative abundance of $C^{12}$ and $C^{13}$ in, 6: 5256(J)
triosephosphate dehydrogenase and glucose-6-phosphate dehydrogenase in, 6: 2803
Plasma
(See also Blood plasma; Electric arcs.)
high-frequency oscillations of electron, 6: 3589(J)
of low-pressure Hg arc, energy distributions and radial potential variations in, 6: 4843
nonhomogeneous nonisothermal electron, theory, 6: 3585(J), 3590(J)
Plastic deformation
(See also as subheading under specific materials.)
effect of fixed or rotating crystal holder on, 6: 6614(J)
in metals, x-ray microscopic study of, 6: 1250(J)
relation of Laue asterism and deformation bands, 6: 6313(J)
response of yielding vibratory system to transient forcing functions, 6: 2676
stress-hardening dependence on orientation, 6: 4081(J)
Plastic film detectors
design, 6: 1278(R)
preparation, 6: 960(R)
Plastic films
preparation of thin, and coating with Al or Ag, 6: 4145(R)
rubber hydrochloride, as replacement for nylon in radiation dectection instruments, 6: 5827
Plasticity
(See also as subheading under specific ceramic and plastic materials; see also ductility as subheading under metallic materials.)
bibliography on stress-strain relations, 6: 4070
Plasticizers
preparation of, for fluorinated elastomers, 6: 2322(J)
Plastics
(See also specific compounds used as plastics; see also Loaded plastics.)
coating with metals evaporated in a vacuum, 6: 6010
corrosion by $H_2O_2$, 6: 240(J)
effects of radiation on electronic processes in, 6: 835(J)
effects of radiation on Nylon, 6: 493(J)
effects of radiation on paramagnetic resonance spectra of dyed and clear, 6: 834(J)
electron scattering cross sections of Nylon, 6: 1037(J)
shielding properties, 6: 3126(R)
thermal expansion at low temperatures, 6: 5758
tracer studies on wear of gears and parts, 6: 4054(J)
Plates
heat emission by, in liquids and gases, 6: 1202(J)
surface properties of explosive-driven, photographic method for determination of, 6: 4520
thermal stresses in, theory, 6: 4086
Platinum
absorption of $Co^{60}$ γ rays in, 6: 2203(J)
conversion electron in neutron-activated, identification of, 6: 4270(J)
electric conductivity of, effect of elastic deformation on, 6: 241(J)

Platinum (cont'd)
electric-resistance increase due to cold work and neutron irradiation, decay during annealing, 6: 5611(J)
gamma ($\gamma$,n), ($\gamma$,p) and Szilard-Chalmers reactions, 6: 4660
gamma reactions, 6: 2181
proton elastic scattering cross sections, 6: 5692(J), 6179
radioactivity induced in, by slow neutron capture, 6: 4251
reaction with $BrF_3$, 6: 2337(J)
tensile properties, 6: 2930
tissue distribution in rabbits, 6: 63(J)
tissue distribution in rats, 6: 496(R)
vacuum evaporation, 6: 3779
wettability by sodium silicates, 6: 4780
Platinum complexes
with tetraammine triiodomercurates, structure and stability, 6: 4403(J)
Platinum electrodes
behavior in polarographic studies, 6: 2585
Platinum isotopes
abundance limits of, mass spectrographic determination, 6: 2987(J)
Szilard-Chalmers concentrations, 6: 4017(J)
Platinum isotopes $Pt^{191}$
formation, 6: 496(R)
Platinum isotopes $Pt^{192}$
nuclear energy levels, 6: 6202(J)
packing-fraction differences involving, mass-spectrographic measurement of, 6: 2991
Platinum isotopes $Pt^{193}$
formation, 6: 496(R)
formation by $\gamma$ rays on Pt, 6: 2181
Platinum isotopes $Pt^{194}$
mass, 6: 3055
Platinum isotopes $Pt^{195}$
decay schemes, 6: 1925(J), 3873(J)
identification, 6: 2181
isomers of, identification and half lives, 6: 4270(J)
mass, 6: 2989
packing-fraction differences involving, mass-spectrographic measurement of, 6: 2991
Platinum isotopes $Pt^{196}$
binding energy of, calculation, 6: 333(J)
mass, 6: 3055
Platinum isotopes $Pt^{197}$
conversion electrons accompanying decay of, 6: 4270(J)
decay schemes, 6: 1925(J)
formation by $\gamma$ rays on Pt, 6: 2181
Platinum isotopes $Pt^{198}$
packing-fraction differences involving, mass spectrographic measurement of, 6: 2991
Platinum–titanium compounds (intermetallic)
crystal structure, 6: 3975(J)
Plutonium
absence in nature, reason for, 6: 2059(J)
bone deposition, 6: 1389
chelation, 6: 496(R)
chronic toxicity comparison with Ra, 6: 3936
disproportionation equilibria and rates in HCl and $HClO_4$ solutions, effects of $\alpha$ particles on, 6: 3261
distribution and excretion by rats, effects of salts of Zr and other metals on, 6: 3206(J)
excretion of, following administration of Ca (ethylenediamine)tetraacetic acid and Fe-3 as chelating agents, 6: 2809
fate and pathological effects of metal implants of, in rats and rabbits, 6: 6290
identification of, lecture on, 6: 1835
oxidation-reduction potentials in HCl and $HClO_4$, 6: 2351(J)
radiochemical determination in air filters, 6: 3182(R)
radiometric determination, 6: 105
removal from low level wastes, 6: 2906(J)
sample preparation for mass spectrographic analysis, 6: 5238
separation from Am and U, 6: 105
tissue distribution in rats, 6: 6291(R)
tissue distribution when inhaled as an aerosol, 6: 2809
toxicology, 6: 526(R)
Plutonium fluoride–thorium fluoride systems
magnetic susceptibility, 6: 4475(J)
Plutonium(IV) fluorides
magnetic susceptibility, 6: 4475(J)
Plutonium(III) ions
absorption spectra and transition probabilities for, 6: 3418
Plutonium(IV) ions
disproportionation, equilibria and reaction rates in, 6: 5764
Plutonium(VI) ions
chloride complexing, 6: 3261
Plutonium(VI) ions (cont'd)
infrared spectra and atomic structure, 6: 3259
Plutonium isotopes $Pu^{238}$
spontaneous fission, 6: 4222
Plutonium isotopes $Pu^{239}$
alpha emission, measurement of, 6: 1481
alpha spectra, 6: 5228
conversion electrons from, 6: 1906
decay scheme, partial, 6: 5228
fission, 6: 698
fission, velocities of fragments from, 6: 3053
fission-fragment energy distribution as function of neutron energy, 6: 3846
fission neutron spectrum, 6: 5470
gamma and x-ray emission, studies with proportional detector, 6: 5698
neutron fission cross sections, 6: 4956(J)
neutron fission cross section, ratio to U, 6: 5885(J)
solvent extraction, development of equipment and procedures, 6: 6574
x-ray emission in decay of, 6: 4657, 5911
Plutonium isotopes $Pu^{240}$
alpha spectra, 6: 5228
conversion electrons from, 6: 1906
Plutonium isotopes $Pu^{241}$
beta spectra, 6: 1906
Plutonium oxide–thorium oxide systems
magnetic susceptibility, 6: 4475(J)
Plutonium oxides
electrodeposition on Pt disks, 6: 2610(J)
Plutonium(III) oxides
identification by x-ray-diffraction study of crystal structure, 6: 5744
Plutonium(IV) oxides
magnetic susceptibility, 6: 4475(J)
Plutonium poisoning
treatment with (ethylenediamine)tetraacetic acid, 6: 6522
Plutonyl ions
magnetic susceptibility and ground state, 6: 5588(J)
Pocket chambers
with audible warning, design, 6: 4322(P)
electrometers for, design, 6: 1581(P)
response, 6: 4373(R)
response to fast neutrons, 6: 1(R)
Polarity
(See as subheading under specific materials.)
Polarization
(See as subheading under specific radiations.)
Polarographic analysis
(See also as subheading under specific materials; see also Polarography.)
equipment for, 6: 552(R)
micro H-cell for, design, 6: 1151(J)
theory of, 6: 1635
theory of kinetic currents, and conversion of rate constants, 6: 2299
Polarographs
design, 6: 4724(R)
dropping-Hg type, design, 6: 3629
high-sensitivity recording type, design, 6: 1163
Polarography
(See also Polarographic analysis as main heading and as subheading under specific materials.)
application to study of metal corrosion, 6: 1450(R)
square-wave, 6: 5986
with stationary electrodes, 6: 5311(R)
theory of catalytic polarographic currents, 6: 2341(R)
Polaroid Corp.
progress report on phosphate-glass $\gamma$-radiation dosimeter, 6: 6122(R)
Pollen
oxygen-induced chromosomal aberrations in, 6: 4
x- and $\gamma$-ray induced chromosomal aberrations in, 6: 27
Polonium
alpha emission, 6: 3387(R)
alpha particles from, range-energy relation and ionization-energy relation in air, 6: 3865(J)
knock-on proton emission by, 6: 2785(J)
lethal dosage determinations, 6: 5556
lethality of, as modified by injections of BAL, in rats, 6: 2814(J)
preparation for use as $\alpha$ source, 6: 3765
tissue distribution in mice, 6: 5556
tissue distribution and excretion of, effects of 2,3-dimercaptopropanol on, 6: 2281(J)
toxicology, 6: 526(R)
x-ray spectra of, bibliography on, 6: 449
Polonium isotopes
alpha spectra, cloud chamber measurement, 6: 5150(J)

Polonium isotopes $Po^{210}$
alpha and gamma emission of, angular correlations, δ: 2527, 2776
alpha emission, δ: 296(R)
alpha particles from, pulse-height distribution, δ: 296(R)
decay schemes, δ: 1628
electron spectra, δ: 954(R)
emission of Pb L x-rays in α decay of, δ: 2523
excited states, spins, δ: 5194(J)
gamma emission, δ: 5657(R)
gamma emission and internal conversion, δ: 4257(J)
gamma radiation accompanying decay of, δ: 5704(J)
genetic effects of α-radiation from, on fungi, δ: 1085
K-shell ionization accompanying α decay, δ: 3870(J)
radiometric determination in tissues, δ: 5556
Polonium isotopes $Po^{211}$
formation, half lives, energy levels, and alpha emission of, δ: 411
isomeric states of, α activity, δ: 3715(J)
Polonium isotopes $Po^{212}$
alpha emission from, δ: 438(J)
nuclear energy levels, δ: 1848(J)
Polonium isotopes $Po^{214}$
fine structure in internal conversion lines of, δ: 4124(J)
Polonium oxychlorides
behavior in organic solvents, δ: 5049(J)
Polycythemia
clinical and biochemical studies, case histories, δ: 3734
effects of radiation on universal reaction in, δ: 2813(J)
effects of x radiation on Co-induced, δ: 3934(J)
treatment with $P^{32}$, δ: 3505(J)
treatment with $P^{32}$, development of acute leukemia following, δ: 6521(J)
Polyenes, diphenyl-
scintillations in, δ: 961
Polymerization
(See also as subheading under specific materials.)
role of negative hydrocarbon free radicals in, δ: 6528
theory of, as applied to the preparation of fluorinated elastomers, δ: 2322(R)
Polymers
diffusion of He and Xe through, δ: 4112
of perfluoropropene and tetrafluoroethylene, preparation, δ: 4301(P)
Polystyrene
(See Styrene polymers.)
Polythene
(See Ethylene polymers.)
Populations
effects of heritable individual differences of sexual behavior on Drosophila, δ: 6237
effects of radiation on genetic factors affecting adaptive values in, of Drosophila, δ: 5546
Porcelain
(See also as products, e.g., Pipes.)
thermal conductivity up to 1300°C, δ: 1443(R)
thermal rupture of porous and non-porous, δ: 199
Pores
size computation from physical adsorption data, δ: 4019
Porosity
(See as subheading under specific materials.)
Porous materials
(See also more specific entries; e.g., Graphite.)
fluid dynamics of, δ: 2360
fluid flow through, heat and mass transfer by, δ: 4486(J)
glass, separation of gases by, δ: 4766
Porous metals
(See also specific metal compacts.)
machining methods, δ: 1234
permeability, δ: 1196, 1232(R)
sweat cooling, δ: 1196, 1197
sweat cooling in, protection achieved by, δ: 864
Porphyrins
chromatographic separation, δ: 4722
degradation of, method for, δ: 510(R)
metabolism, δ: 4722
preparation of $C^{14}$-labeled uroporphyrin, δ: 4722
selective concentration in tumor tissues, as type of cancer diagnosis, δ: 3208(J)
synthesis of $I^{131}$-labeled diiododeutero-, δ: 5083(J)
Positronium
annihilation and energy levels of, δ: 681(J)
fine structure, δ: 447, 1861
fine structure, electrodynamic corrections to calculations, δ: 3833(J)
formation, δ: 5657(R)
formation in Freon 12, δ: 1771
formation of triplet, in gases, δ: 1305
Positronium (cont'd)
formation, Zeeman effect, and hyperfine structure of, δ: 2710(R), 2951(J)
hyperfine structure, δ: 5922(J)
production, quenching, and Zeeman effect in ortho-, δ: 1533
three-photon annihilation in magnetic fields, δ: 2740(J)
Zeeman and hyperfine splitting, δ: 6621(R)
Zeeman effect in, δ: 5456(R)
Positrons
(See also Electrons.)
annihilation, lecture demonstration of, δ: 2743(J)
absorption by Pb, δ: 395(J)
annihilation half lives of, δ: 1839
annihilation in metals, δ: 2509(J)
application of resolvent operators to Feynman's theory of, δ: 5003(J)
from $C^{12}(p,\gamma)N^{13}(\beta+)$, δ: 1879(J)
collisions with electrons, δ: 4548(J)
half-lives in condensed materials, δ: 1910
interactions with electrons, integro-differential equation for Green's function, δ: 5922(J)
mass measurements, δ: 995(J)
nuclear disintegration by position-K electron annihilation, δ: 2490(J)
scattering by A, δ: 401(J), 1899(J)
scattering by electrons in He, δ: 5492(J)
scattering by N, cloud chamber study, δ: 4548(J)
scattering by N nuclei, δ: 5688(J)
scattering cross sections for coulomb field of nuclei, δ: 5906(J)
scattering in nuclear emulsions, δ: 661(J)
short-range interaction of negatrons with, δ: 1861
spectra of, from μ-meson decay, δ: 3367, 3368
theory of, δ: 3450(J)
three-photon annihilation, δ: 1305, 1771
three-photon annihilation, triple-coincidence technique for study of, δ: 4918
Potassium
abundance in igneous rocks and meteorites relative to Rb, δ: 5373(J)
atomic weight, δ: 3972(J)
biological role of, in relation to its radioactivity, δ: 3163(J)
characteristic x rays of, from $Ca^{41}$ decay by K capture, δ: 2217(J)
chromatographic separation from Rb and Cs, δ: 848(J)
concentration in erythrocytes, δ: 791
determination in Na metal, δ: 815
distribution of, following acute whole-body irradiation, δ: 2292(J)
effects on carbohydrate metabolism, δ: 758
effects on fermentation, δ: 5542
electrical conductivity and volume changes on fusion, δ: 5394(J)
exchange between blood plasma and body tissues in rats, δ: 1110
exchange rate of, in circulating blood of rabbit, δ: 1111
exchange rate of, in rat erythrocytes, δ: 793
heat of reaction with water at 25°, δ: 1132(J)
infrared spectra of, calculations, δ: 161(J)
intracellular, determination by isotope dilution technique, δ: 2847(J)
metabolism in x-irradiated dogs, δ: 510(R)
pathological effects on Drosophila development, δ: 5964
permeability of human erthrocytes to, δ: 2577
radiometric determination in solid samples, δ: 2370(J)
radiometric determination in urine, δ: 1116
solubility of oxygen in, δ: 1237
spectrographic determination in organic solids, δ: 158
toxicology, δ: 2279(R)
Potassium (liquid)
evaporation coefficient of, between 66 and 100°C, δ: 3228(J)
thermal conductivity, measurement of, δ: 1444(J)
viscosity, temperature dependence of, δ: 6031(J)
Potassium acid fluorides
hydrogen position in, neutron diffraction determination, δ: 3974(J)
Potassium borates
coloration, δ: 142(J)
Potassium bromates
Szilard-Chalmers reactions, δ: 2327
Potassium bromide crystals
absorption bands in irradiated, δ: 1427
luminescence of x-irradiated, excitation conditions, δ: 6476(J)
Potassium carbonates
reaction with urea, mechanism of, δ: 4026(J)
Potassium chloride crystals
dark currents in colored, after electron bombardment, δ: 4654(J)
inclusion of $Tl^+$ in, energy required for, δ: 2441(J)
luminescence of x-irradiated, excitation conditions, δ: 6476(J)
Potassium chlorides
activity coefficients, δ: 2643(J)
coloration and luminescence of, radiation-induced, δ: 142(J)
diffusion of Na in aqueous tracer studies of, δ: 2350(J)

Potassium chlorides (cont'd)
electric conductivity and density, 6: 2862
luminescence spectra of Ni- and Cu-activated, 6: 3633(J)
microwave absorption spectra at high temperatures, 6: 4674(J)
thermodynamic properties, 6: 560
Potassium chloromercurates(II)
nuclear magnetic resonance absorption from four-proton system in monohydrate of, 6: 6443(J)
Potassium copper sulfates
magnetic susceptibility, 6: 6624(R)
Potassium cyanides
radiosensitivity effects, 6: 3176(J)
Potassium cyanocuprate(I)
nuclear quadrupole resonance frequencies of Cu in, and bond structure, 6: 5466(J)
Potassium fluochromates
thermal decomposition of $KCrO_3F$, 6: 3993(J)
Potassium fluomolybdates
hydrolysis of $K_3MoO_3F_3$, 6: 3993(J)
Potassium fluophosphates
infrared spectrum and crystal structure of, 6: 1667(J)
Potassium fluorides
composition and structure of, containing excess F, 6: 2033(J)
infrared spectrum, 6: 1665(J)
recovery from solid sludge, 6: 3459(P)
Potassium fluotitanates
crystal structure, 6: 3525
hydrolysis of $K_2TiOF_4$, 6: 3993(J)
Potassium–hydrogen–oxygen systems
phase studies, 6: 5569
Potassium iodates
reduction by radiation, effects of oxygen on, 6: 5343(J)
Potassium iodide crystals
activated, optical properties, 6: 6660
Potassium iodides
determination of Ti in, by neutron activation, 6: 4730
long-lived phosphorescence of Tl-activated, 6: 2434
luminescence, temperature effects on, 6: 6125(J)
scintillation and luminescence of pure and Tl-activated, 6: 302(J)
Potassium ions
collision of negative, with atoms, 6: 3705(J)
Potassium isotopes
hyperfine structure anomaly of, 6: 3397(J)
neutron reactions $(n,\gamma)$, 6: 3122(J)
spectra, 6: 1750(R)
Potassium isotopes $K^{37}$
beta spectra and half lives, 6: 735
Potassium isotopes $K^{38}$
gamma spectra, 6: 1351(J)
Potassium isotopes $K^{39}$
mass, 6: 991(J), 1284(J)
sign of quadrupole interaction energy of, in $K_2$, 6: 3836(J)
Potassium isotopes $K^{40}$
beta spectra, 6: 3867
decay scheme, 6: 2531(J)
decay scheme, association of $\gamma$ radiation and K-capture in, 6: 4268(J), 4992(J)
gamma spectra, 6: 3712
heat production by, in earth, 6: 5373(J), 6361(J)
K capture/$\gamma$ emission ratio, 6: 3719(J)
neutron reactions (n,p), 6: 4866
nuclear magnetic moment and hyperfine splitting of, 6: 3397(J)
proportion of, in earth's radioactivity, 6: 6360(J)
radioactive decay, 6: 369(J)
Potassium isotopes $K^{41}$
half lives of excited states of, 6: 3117(J)
mass, 6: 991(J), 1284(J)
Potassium isotopes $K^{42}$
decay of, $\beta$–$\gamma$ angular correlations in, 6: 1843(J)
formation by proton bombardment of Cu, 6: 700
Potassium oxides
solubility in K, 6: 1237
Potassium–sodium alloys
determination of C in, 6: 3229
heats of formation at 25°, 6: 1127(J)
solubility of oxygen in, 6: 1237
spectrochemical determination of Hg in, 6: 2013
thermal conductivity. 6: 6587
Potassium–sodium alloys (liquid)
measurement of flow with electromagnetic flowmeter, 6: 4476
molecular structure, by x-ray-diffraction analysis, 6: 5391(J)
sampler and extraction apparatus for, 6: 5376
thermal conductivity at 200 to 815°C, 6: 232
Potassium zirconium fluorides
electrolysis, for production of Zr, 6: 6364(R)
Potentiometers
multiple-range, for use with thermocouples, 6: 1496
Poultry
(See Chickens.)
Powders
(See also by materials, e.g., Nickel powders; see also Particles.)
surface-area measurement, 6: 1426
thermal conductivity, 6: 5096
Power
(See Electric power; Nuclear power; Power reactors.)
Power breeder reactors
(See also Breeder reactors; Power reactors.)
economic aspects, 6: 5712(J)
electric power generation utilizing heat energy from, 6: 5711
Power cycles
single and double-reheat, for steam power plants, 6: 3265
Power reactors
(See also specific reactors used for production of power; see also Nuclear power.)
cycle analysis for, 6: 577
Power supplies
(See also specific instruments and various components, e.g., Electron tubes; see also Current regulators; Electric power; Rectifiers; Voltage regulators.)
circuit for d-c high-voltage, f-m-regulated, 6: 1585(P)
design, 6: 59(R), 407(R), 1304(R)
full wave a-c circuit for control of, 6: 6231(P)
generator for, design of 100 kw unipolar, 6: 4853(R)
handbook on, 6: 2976
modified Barth circuit for, 6: 3253(R)
monitor for stability of, used for electron microscopes, 6: 5419
operating and technical manual on E.H.T. Unit - AEP 1007A (Canada), 6: 1494
performance curves for, 6: 628
radio-frequency, for high-voltage accelerators, 6: 3698(J)
Praseodymium
absorption spectra of, theory, 6: 1271(J)
electric conductivity at low temperatures, 6: 5380
fractional-precipitation separation from La, 6: 1174(J), 6334(J)
hyperfine structure studies with echelle spectrometer, 6: 6203
magnetic properties, 6: 3251(J)
neutron scattering cross sections, 6: 5399(R)
oxidation in humid air, mechanism, 6: 4011(J)
spectrographic determination in rare earth mixtures, 6: 2308
x rays of, in $Nd^{140}$ decay, 6: 4657
Praseodymium acetylacetonate
exchange and hydrolysis reactions, 6: 3248(R)
Praseodymium chlorides
absorption spectra, 6: 1628
activity coefficients, conductances, and transference numbers of, 6: 562
activity coefficients in aqueous solutions, 6: 558
paramagnetic resonance of heptahydrate, 6: 3679(J)
transference numbers, 6: 563
Praseodymium compounds
absorption spectra, 6: 1272(J)
fluorination with $ClF_3$ and $BrF_3$, 6: 2337(J)
purification by ion exchange, 6: 559
Praseodymium ethyl sulfates
hyperfine structure in paramagnetic resonance spectrum, 6: 6154(J)
Praseodymium fluorides
reaction with $F_2$, 6: 5060(J)
reflection spectra, 6: 2339(J)
Praseodymium isotopes $Pr^{140}$
beta spectra and half lives, 6: 735
Praseodymium isotopes $Pr^{141}$
nuclear spin, 6: 3679(J)
nuclear spin from hyperfine structure in Pr ethyl sulfate, 6: 6154(J)
Praseodymium isotopes $Pr^{142}$
beta spectra, maximum energy, 6: 5706(J)
gamma emission and secondary-electron spectrum, 6: 4983(R)
secondary electron spectrum, 6: 3109
Praseodymium isotopes $Pr^{143}$
preparation of carrier-free, 6: 1422
Praseodymium isotopes $Pr^{144}$
beta spectra, 6: 2790(J)
decay schemes, 6: 5517(J)
decay schemes and angular correlations, 6: 3434
energy levels, from $Ce^{144}$ decay, 6: 5517(J)
internal conversion in, 6: 1919(J)
Praseodymium oxide–cerium oxide systems
reduction by $H_2$, 6: 1683(J)

Praseodymium oxide–uranium oxide systems
phase studies and crystal structure, 6: 5573(J)
Praseodymium oxides
heat content, specific heat, and entropy, 6: 147(J)
phase studies and crystal structure, 6: 5573(J)
reaction with $H_2O$, 6: 4011(J)
reflection spectra, 6: 2339(J)
Praseodymium oxyfluorides
reflection spectra, 6: 2339(J)
Praseodymium peroxides
preparation and identification, 6: 1684(J)
Praseodymium silicides
preparation and crystal structure, 6: 2335(J)
Precipitation
(See also as subheading under materials precipitated.)
from homogeneous solutions, methods for, 6: 2602(J)
Precipitators
(See Cyclone precipitators; Electrostatic precipitators; Thermal precipitators.)
performance and evaluation in air cleaning, 6: 3266
Preferred orientation
(See also as subheading under specific materials.)
determination by spiral-scanning x-ray-reflection goniometer, 6: 5634
determination in worked U, method for quantitative, 6: 6725
Pressure drop
(See also Air flow; Gas flow; Liquid flow.)
for air flowing in small tubes, 6: 4481
measurement of, associated with heat transfer in air flowing through smooth tubes under varying conditions, 6: 3268
measurement of, in glass spheres, 6: 1441(R)
in noncircular ducts and annuli, bibliography on, 6: 3776
in two-phase flow, measurement and theory, 6: 5590
Pressure gages
(See also Hypsometers; Manometers; Vacuum gages.)
adsorption manometer for below $10^{-7}$ mm, 6: 3278(J)
electronic, design of, 6: 4319(P)
interferometer camera for transient-pressure recording, design, 6: 5813
ionization gage, design of easily degassable, 6: 3636(J)
method and apparatus for measuring low-pressures and related conditions, 6: 4338(P)
oscillation type, design, 6: 484(P)
performance of various types for low pressure studies, 6: 5349(R)
Pressure vessels
welding electrodes for thick, 6: 6021(J)
Princeton Univ.
progress reports, 6: 90(R)
Prodigiosine
distribution and clearance of inhaled, by respiratory tract, 6: 3158
extraction from blood plasma and body tissues following injection, and spectrophotometric analysis, 6: 2805
tissue distribution following inhalation, 6: 5552
Promethium
bone deposition, 6: 1389
Promethium(III) ions
absorption spectra and transition probabilities for, 6: 3418
Promethium isotopes
decay schemes, 6: 1907
formation, half lives, and radiation emission, 6: 5917(J)
formation, mass, and decay characteristics, 6: 1927
Promethium isotopes $Pm^{148}$
identification, 6: 2184(J)
Promethium isotopes $Pm^{150}$
identification, 6: 2184(J)
Promethium isotopes $Pm^{151}$
half lives, 6: 1424(R)
identification, 6: 4724(R)
identification, from neutron activation of Nd, 6: 5298(R)
Propane
elastic scattering and neutralization of H ions in, 6: 6469(J)
preparation of labeled, 6: 551
thermal conductivity at low pressure, 6: 6591(J)
Propane, bromo-
chemical effects of neutron irradiation on, effect of phase on, 6: 2884(J)
Propane, 1-bromoheptafluoro-
preparation, properties, and infrared spectrum, 6: 2323(J)
Propane, 1-chloroheptafluoro-
preparation, properties, and infrared spectrum, 6: 2323(J)
Propanedioic acid
(See Malonic acid.)
1,3-Propanedione, 1,3-diphenyl-
chelate compound formation constants of, with metal ions, 6: 6299
1,2,3-Propanetriol
(See Glycerol.)
1-Propanol–water systems
activity coefficients, 6: 6374
2-Propanol
chromic acid oxidation of, D isotopic effects, 6: 5733(J)
mass spectra of normal and labeled, 6: 1628
preparation of labeled, 6: 551
1-Propanol, 2,3-dimercapto-
effects on Po toxicity in rats, 6: 2814(J)
effects on tissue distribution and excretion of Po, in rats, 6: 2281(J)
radiosensitivity effects, 6: 46
2-Propanone, 1,3-dihydroxy- (labeled)
synthesis, 6: 571(J)
2-Propanone, 1,3-diphenyl-
synthesis, 6: 6579(R)
Propene, 1,3-dichloro-2-fluoro-
preparation and properties, 6: 3962(J)
Propenes, bromo-
catalyzed rearrangements of isomeric, 6: 3515
Propionates
biosynthesis in relation to 2-methylbutyric acid and isoleucine metabolism, 6: 5559
metabolism by Propionibacterium pentosaceum, 6: 1697
Propionic acid
ionization in dioxane-water solutions, 6: 1631
oxidative reactions in fermentation of, 6: 1070(J)
Propionic acid, α-amino-
(See Alanine.)
Propionic acid, α-amino-β-hydroxy-
(See Serine.)
Propionic acid, α-bromo-
polarographic behavior, 6: 538
Propionic acid, formyl-
reduction by Wolff-Kishner method, 6: 178(J)
Propionic acid, β-(4-hydroxy-3,5-diiodophenyl)-α-phenyl-$I^{131}$-labeled as radiographic contrast medium, 6: 4377(J)
Propiophenone, p-amino-
protective action against lethal doses of x radiation, 6: 5948
Proportional detectors
alpha counting with, effect of high β backgrounds on, 6: 6121
for alpha detection in large samples, 6: 959
application to determination of decay scheme of $I^{131}$, 6: 1922(J)
$BF_3$-filled, design, performance, and operation, 6: 1812(J)
design, 6: 2974(R), 3464(P), 4317(P)
design and performance, 6: 645
effect of negative ions on, 6: 1533
efficiency, 6: 409
efficiency in γ-ray studies up to 100 kev, 6: 5698
energy loss of electrons in, 6: 393(J)
gas of low density and desirable characteristics for, 6: 4146
gas-filled, use in $C^{14}$ age estimations, 6: 6418(J)
$He^3$-filled, for neutron measurement, 6: 6131(J)
internal, for low-energy β counting, 6: 5160(J)
ionization of gases by α particles in, mechanism, 6: 5449(J)
Mark V model I Beta-Contamination Monitor, NRDL, design, 6: 5431
in measuring intensities of diffracted x rays, 6: 1291(J)
methane-filled effect of addition of He to, 6: 2710(R)
for neutron detection, design, 6: 3472(P)
for neutron flux measurements in energy range 0.1 to 1 Mev, design, 6: 4154(J)
performance of 4π, in β counting, 6: 277(R)
plexiglas, of constant sensitivity to x radiation, 6: 4586(J)
portable fast-neutron survey instrument, 6: 5833(R)
pressurized, for $C^{14}$ and T determination, 6: 5836(J)
for range 125-300 v, 6: 6227(P)
for soft β and x radiation, 6: 309(J)
theory and applications, 6: 2140
thermal neutron detection, design, 6: 4330(P)
for thermal neutron surveying, 6: 1288
with tissue-equivalent walls, design and performance, 6: 5716(R)
windows for, rubber hydrochloride films as, 6: 5827
Propyldisulfide, perfluoro-
preparation, physical properties, and infrared spectra of, 6: 129(J)
Propyltrisulfide, perfluoro-
preparation, physical properties, and infrared spectra of, 6: 129(J)
Propyne
synthesis of deuterated, 6: 2641(J)
Propyne, 1-bromo-
microwave spectra and molecular structure, 6: 4434(R)
Propyne, 1-iodo-
microwave spectra and molecular structure, 6: 4434(R)

Propyne, 3,3,3-trifluoro-
molecular structure, 6: 554(J)
synthesis and infrared spectra, 6: 553(J)
Prospecting
for oil and gas, radioactivity surveys in, 6: 3282(J)
for petroleum, neutron well logging in, 6: 2101(J)
Protactinium chlorides
absorption spectra and aqueous chemistry of $PaCl_4$, 6: 5978
Protactinium complexes
with oxalic acid, stability of, 6: 2002(J)
Protactinium isotopes
rapid separation methods for, from cyclotron bombarded $Th(NO_3)_4$, 6: 1585
Protactinium isotopes $Pa^{225}$
half lives of, upper limit for, 6: 2533(J)
Protactinium isotopes $Pa^{231}$
decay schemes, 6: 3442(J)
neutron capture cross sections, 6: 5863
nuclear properties, 6: 1928
beta emission by, 6: 2946
Protactinium isotopes $Pa^{232}$
gamma and x-ray emission in decay of, 6: 4657
neutron capture cross sections, 6: 5863
Protactinium isotopes $Pa^{233}$
critical electrodeposition potentials, 6: 3222(J)
gamma and x-ray emission in decay of, 6: 4657
Protactinium isotopes $Pa^{234}$
half lives and ion exchange separation of, 6: 437(J)
Protactinium isotopes $Pa^{238}$
formation in $\mu^-$-meson capture by U, 6: 6670
Proteins
(See also Lipoproteins.)
biosynthesis during cleavage and development of fertilized A. punctulata eggs, 6: 2807(J)
biosynthesis of $C^{14}$-labeled by Rhodospirillum rubrum, 6: 6013
chromatographic determination in Drosophila, 6: 767(J)
chromatographic separation and determination in lipoproteins, 6: 4442
effects of radiation on, review, 6: 4359(J)
incorporation of glycine into, in human liver slices, 6: 2846(J)
metabolism, clinical test of, 6: 2559(R)
metabolism, effects of insulin on, 6: 2289
metabolism in children with and without cystic fibrosis of pancreas, measurement, 6: 6293
metabolism in healthy patients and those with pancreatic insufficiency, 6: 6524
separation of, for isolation of protein bound iodine of blood plasma, 6: 4697(R)
Protium
(See Hydrogen.)
Proton beams
energy distribution at internal cyclotron target, 6: 4966
ion source for 20-kev, 6: 5206(J)
measurement of gas density with, 6: 2507(J)
Proton cross sections
(See also the subheadings proton cross sections and proton reactions under specific materials.)
theory of, 6: 686
Proton scattering cross sections
(See also as subheading under specific materials.)
of bromine, C, N, O, and Ag, 6: 1546
of deuterons, phase-shift analysis of experimental data, 6: 4643(J)
measurement, 6: 3386(R)
measurement by magnetic deflection method, 6: 1029
of protons, calculations for various models, 6: 5895
theory of, 6: 1551(J)
Proton sources
knock-on proton emission by alpha sources as, 6: 2785(J)
Proton spectra
measurement and calculation of, 6: 388
Proton spectrometers
design, 6: 3387(R)
Proton synchrotons
design, bibliography on, 6: 5891(J)
theory and design of strong-focusing, 6: 6176
Protons
(See also Cosmic protons.)
angular distribution in p-p scattering, calculations assuming coulomb-nuclear interference, 6: 5686
angular distribution of, from $Be^9(d,p)$, 6: 5661
angular distribution of, from deuteron photodisintegration, 6: 1539(J), 3669(J)
angular distribution of, from photon irradiation of nuclei, 6: 3082(J)
angular distribution of elastically scattered, theory, 6: 4974(J)
Protons (cont'd)
annihilation by antiprotons, 6: 3039(J)
anomalous magnetic moment of, theory, 6: 1054(J)
binding energy in light nuclei, discontinuities in, 6: 6450(J)
bremsstrahlung emission by, 6: 3386(R)
from C(γ,p) reactions, 6: 701
collisions with protons in Li, 6: 3089
cross sections for electron capture and loss by, passing through air, 6: 1905(J)
cross sections for production of fast, from n-d collisions, 6: 3424(J)
from D(n,p), angular distribution of, 6: 361
detection and energy selection in range 100 to 250 Mev, 6: 5486(R)
deuteron reactions $(d,\pi^+t)$, 6: 4084, 5791
deuteron elastic scattering, by analysis at 190 Mev, 6: 6697
deuteron scattering by, 6: 2946
elastic scattering by Al, Fe, Ni, Cu, Ag, Sn, and Pt, 6: 5692(J)
elastic scattering of high-energy, 6: 3422(J)
electromagnetic interference effects in charged π-p scattering, 6: 1514
electron capture by slow, in He, 6: 5616(J)
energy loss in $D_2O$ ice, 6: 5500(J)
Fermi-type interactions, 6: 4923(J), 4999(J)
Fermi-type interactions and selection rules, 6: 5005(J)
from fission of $U^{235}$, energy distribution of, 6: 698
gamma reactions (γ,π), theory, 6: 6132
high-energy, response of NaI crystals to, 6: 6665
from $H^3(d,p)$, angular distribution of, 6: 1330(J)
inelastic scattering from light nuclei, 6: 5495(J)
interactions with electrons, one-body relativistic Dirac equation for, 6: 4676
interactions with mesons, 6: 3648
interactions with neutrons, 6: 386, 1346(J)
interactions with neutrons, symmetrical pseudoscalar meson theory of, 6: 4609(J)
interactions with neutrons, theory, 6: 4189(J)
interactions with photons in $H_2$ high-pressure chamber, 6: 1393(R)
interactions with photons, $\pi^0$ mesons production by, 6: 6620(R)
interactions with protons, 6: 385, 2182(J)
ionization ranges in $H_2$ and $O_2$, 6: 1339
from $Li^6(d,p)$, angular distribution of, 6: 710(J)
long-range interactions with protons, 6: 336
magnetic moment, fourth-order corrections to, 6: 5523(J)
magnetic-moment ratio between deuterons and, 6: 2750(J)
mass, from $T(p,n)He^3$, 6: 1859
mass changes of, in p-p scattering, 6: 1893(J)
mass difference between neutrons and, from Q values of reactions involving $C^{12}$ and $C^{13}$, 6: 4955(J)
mass difference involving, from nuclear reaction energies, 6: 2753
measurement of low-energy, in nuclear emulsions by δ-ray counting, 6: 6420(J)
meson production by annihilation of antiprotons and, 6: 2457(J)
π-meson scattering by, effect of coulomb forces on, 6: 6133
$\pi^+$-mesons from neutrons on, 6: 3372(J)
multiple coulomb scattering in nuclear emulsions, 6: 1550(J), 6473(J)
multiple scattering in gases, 6: 4235(J)
neutron elastic scattering by, energy dependence, 6: 4240(J)
neutron elastic scattering by, theory, 6: 3051(J)
neutron scattering by, effect of chemical binding on, 6: 2503
neutron scattering by, in presence of spin-orbit coupling, 6: 3861(J)
neutron scattering by bound, integral equation and impulse approximation for, 6: 4973(J)
nuclear reactions of, bremsstrahlung from, 6: 337
polarization and scattering by He, 6: 1887
polarization by double scattering, 6: 1900(J)
proton double scattering by, polarization effects in, 6: 5895
proton reactions $(p,d\pi^+)$, theory, 6: 328(J)
proton reactions $(p,\pi^+)$, angular distribution and excitation function, 6: 5454(R)
proton reactions $(p,\pi^+)$, theory, 6: 6428(J)
proton scattering by, angular distribution and cross section for 147-Mev, 6: 5907(J)
proton scattering by, coulomb-nuclear interference in, 6: 5686
proton scattering by, differential cross sections at 5 Mev, 6: 5902(J)
proton scattering by, in 120- to 350- Mev range, 6: 6695
proton scattering by, phase-shift calculations for various models, 6: 5895
range-energy relation, 6: 4641
range-energy relation in air, 6: 1345(J)
range-energy relation in Al, 6: 1345(J), 4649(J)
range-energy relation in dry nuclear emulsion, 6: 2157(J)
range-energy relation in gases and solids, 6: 2198
range-energy relation in H and O, 6: 2199
range-energy relation in nuclear emulsions, 6: 391(J), 399(J)
range in Al, 6: 4641

Protons (cont'd)
range of 18-Mev, in Al, 6: 1901(J)
range straggling of, 6: 1897(J)
recoil effect on electron-proton forces and inapplicability of energy law, 6: 3137(J)
resonant energies for radiative capture by $Be^9$ in energy range below 520 kev, determination, 6: 6423(J)
response of scintillation crystals to, 6: 966(J)
scattering, Fermi's scattering length in, 6: 5897(J)
scattering, theory, 6: 724(J)
scattering by C, 6: 3090
scattering by deuterons, impulse approximation for, 6: 1896(J)
scattering by deuterons, theory, 6: 2508(J)
scattering by He, 6: 1040(J)
scattering by H near 18 Mev, 6: 6694
scattering by meson fields, theory, 6: 1042(J)
scattering by nuclei, 6: 389
scattering by protons, 6: 385, 3386(R)
scattering by protons, meson potentials in, 6: 2519(J)
scattering by protons or neutrons, theory, 6: 1894(J)
scattering in nuclear emulsions, 6: 391(J)
scattering of 18.3-Mev, by Al, Fe, Ni, Cu, Ag, Sn, and Pt, 6: 6179
scattering of neutrons by, 6: 387
scattering of neutrons by, theory, 6: 1043(J)
scattering of 9.48-Mev by He, differential cross section, 6: 6159(J)
spin echo envelope for, in dichloroacetaldehyde, 6: 2170(J)
star production by, 6: 3386(R)
star production by, in nuclear emulsions, 6: 1534
stopping by organic compounds, effect of chemical structure on, 6: 6180
from 270-Mev neutron-deuteron collisions, 6: 716
yields of, from $\gamma$ radiation on Si and Mg isotopes, 6: 1874(J)
Protons (negative)
formation from $V^4$ particles, probability of, 6: 1488
production by various processes, cross sections for, 6: 3691(J)
Protozoa
(See also specific genera; e.g., Amoeba; Paramecium.)
effects of radiation and nitrogen mustard on, 6: 4692(R)
Puerto Rico Univ.
progress reports, 6: 610(R)
Pulmonary absorption
(See as subheading under specific materials.)
Pulmonary edema
prophylaxis with mecholy or carcholin, 6: 5539
Pulse analyzers
(See also Oscillographs.)
calibration, 6: 407(R)
calibrator unit for, 6: 629
coincidence, design, 6: 1499
design, 6: 632(J), 634(J), 962(R)
gray wedge, using photographic techniques, 6: 6118
manuals for a cathode ray oscilloscope type 1089B (British), 6: 3808
for measurement of mean deviation of pulses in counting instruments, design and calibration, 6: 5447(J)
for measuring magnitude distribution of a series of events, 6: 6228(P)
multichannel, circuits, 6: 6130(J)
photographic-recording, design, 6: 5829
principles of operation and voltage discriminators for, 6: 5140(J)
for scintillation detectors, design, 6: 6412
single- and multi-channel, design, 6: 3336(R), 3712(R)
single-channel differential, circuits for, 6: 5842(J)
for spectrometers, 6: 5441(J)
statistics of mean deviation meter for radiation counters, 6: 5448(J)
ten-channel, design, 6: 4127(J)
testing, 6: 936(R)
for time interval measurements, 6: 4129(J)
twenty-channel, operation at ORNL, 6: 5399(R)
twenty-channel, performance and sweep circuit for, 6: 5833(R)
types employed in nuclear research and their performance, review, 6: 1797
Pulse columns
performance in extraction of Co from Ni, 6: 5757
Pulse counters
(See Radiation detection instruments; Radiation detectors; Scalers.)
Pulse generators
design, 6: 277(R), 483(P)
design of f-m, 6: 3468(P)
for discriminator calibration, design, 6: 629
handbook, 6: 2976
for a magnetic scaling circuit, design, 6: 2127
mercury-relay, development of, 6: 3335(R)
for music range, design, 6: 943(J)
photographs and drawings of, 6: 941
Pulse generators (cont'd)
for producing pulses of variable duration, 6: 6224(P)
for production of square 0.2- to 10-$\mu$sec pulses, 6: 5139(J)
for testing scintillation counters, 6: 5440(J)
x-ray tube pulser, design, 6: 5639(R)
Pulse integrators
with binary scaling unit, design and performance of, 6: 2980(J)
Pulse modifiers
delay lines as, for counting systems of wide dynamic range, 6: 4145(R)
design, 6: 486(P)
performance, 6: 5417(R)
photographs and drawings of, 6: 941
Pulse transformers
design, 6: 4331(P)
high-voltage, fundamental design considerations for, 6: 2416
high-voltage multiple core type, design, 6: 4334(P)
Pumice
as an aggregate for light weight structural concrete, 6: 1206
Pumps
(See also Centrifugal pumps; Electromagnetic pumps.)
for corrosive gases and liquids, design, 6: 5770
mercury piston gas, for ventilating animal exposure chambers in isotope experiments, 6: 4849
Pumps (liquid metal)
(See also Electromagnetic pumps.)
homopolar generator, design and performance of, 6: 3276
mechanical, in Alplaus (Genie) heat-transfer system, design and performance, 6: 5366
Puncheon Camp Mine (North Carolina)
pegmatite minerals of rare-earth type in, 6: 4496
Pupae
effects of x radiation on Drosophila, 6: 2265(J)
relative effects of 50-kev, 180-kev, and 31-Mev x radiation on development of Drosophila, 6: 6509(J)
Purdue Research Foundation
progress reports on radiation effects on semi-conductors, 6: 6705(R)
Purdue Univ.
progress reports, 6: 3411(R), 3854(R)
Purine, 6-amino-
(See Adenine.)
Purines
biosynthesis in A. aerogenes, tracer studies, 8: 5530
metabolism by L. casei, 6: 5531
metabolism in the presence and absence of folic acid, 6: 1112
synthesis of $C^{14}$-labeled in 2-position, 6: 4451(J)
Pyrethrins
biosynthesis of $C^{14}$-labeled, 6: 5354(J)
Pyridine
electron energy levels of, 6: 1769
nitration and synthesis, 6: 6579(R)
reactions with hexafluorocyclobutene, 6: 2867(J)
Pyridine, 4-carboxymethyl-2-phenyl-
synthesis, 6: 91(R)
Pyridinium bromides, poly-4-vinyl-N-butyl-
electrical conductivity under high field excitation, measurement, 6: 3747
Pyridoxine
protective action against toxic effects of $P^{32}$, 6: 1081
Pyrimidines
synthesis of $C^{14}$-labeled in 2-position, 6: 4451(J)
Pyrite
absorption of xanthates on, 6: 251(R), 2073(R)
depression of, in flotation, 6: 3294(R)
flotation, tracer studies of, 6: 251(R)
oxidation rate, 6: 3293(R)
Pyrometers
(See also Thermocouples; Thermometers.)
design, 6: 5789(R)
window shield for, for use in vacuum melting operations, 6: 1445
4-Pyrone
synthesis of deuterated, 6: 4419(J)
Pyrophosphoramide, octamethyl-
metabolism and tissue distribution in citrus plants, and lethal dosage determinations for citrus mites and thrips, 6: 5965
translocation in black bean plants, and use as systemic insecticide, 6: 5558
Pyrrolidone, vinyl- (polymers)
metabolism of intravenously administered, 6: 2284
Pyruvates
biosynthesis by fungus, 6: 532(J)
metabolism in liver in vitro, tracer studies, 6: 5036
metabolism in rat liver, 6: 758
oxidation in mitochondria, 6: 760

Pyruvic acid
effects of radiation on aqueous, 6: 2888(J)
polarographic behavior, 6: 1635
reduction by Wolff-Kishner method, 6: 178(J)
synthesis of labeled, 6: 1179(J)
Pyruvonitrile
hydrolysis in aqueous concentrated HCl and in an ethereal medium, 6: 1179(J)

Q

Quadrupole moments
(See as subheading; see Magnetic moments; Nuclear magnetic moments.)
Quantum electrodynamics
(See also Quantum mechanics.)
analytic behavior of Dyson transformation function, 6: 6208(J)
atomic hyperfine structure from, 6: 3140(J)
charge renormalization accompanying radiative corrections in, 6: 1362(J)
conservation laws for electromagnetic field of zero rest mass, 6: 6403(J)
conservation laws for particles interacting with fields of zero rest mass, 6: 6404(J)
conservation laws in, 6: 1932(J)
conservation of parity in boson interaction, 6: 2546(J)
covariant auxiliary condition for, 6: 1056(J)
decay of spontaneous emission, 6: 3711
derivation of Hamiltonian describing fast-electron interaction in heavy atoms from, 6: 3606(J)
divergence of perturbation theory in, 6: 2549(J)
electromagnetic effects due to spin-orbit coupling, 6: 1838
electron self-energy and radiation corrections, 6: 4680(J)
electron self-energy problem in, 6: 2795(J)
energy density tensor in gauge-independent, 6: 1057(J)
field theory of, vacuum induced current in, 6: 4575(J)
formulation, 6: 453(J)
formulation with charge as operator, 6: 5242(J)
forward scattering of light by a Coulomb field, 6: 3420(J)
gauge-independent, 6: 744(J)
gauge invariance in, 6: 5243(J)
group representation and parity conservation, 6: 5245(J)
interaction of spinning particle with field, 6: 1933(J)
many-electron problem in solids, 6: 754(J)
meson theories, 6: 746(J)
multiple boson processes, 6: 745(J)
normalization group in, 6: 458(J)
one-particle relativistic electron theory, 6: 5399(R)
parameterization, 6: 6624(R)
polarization states in electromagnetic, meson, or photomeson Compton effects, calculation, 6: 3453(J)
proton magnetic moments, fourth-order correction to, 6: 5523(J)
quantization of Dirac's new classical theory, 6: 1939(J), 1940(J)
radiation corrections in, 6: 455(J)
radiation emission, self-energy, and Lamb shift in unitary, 6: 4294(J)
radiation from an electron in a magnetic field, 6: 918, 933(J)
radiation reaction in relativistic motion of a particle in a wave field, 6: 1935(J)
relativistic equation for bound-state problems, 6: 1937(J)
relativistic integral equations for scattering and bound states of two particles, 6: 6206(J)
relativistic wave function derivations for K, $L_I$, and $L_{II}$ electrons at cut-off field values, 6: 6682(J)
renormalization constants in, definition, 6: 5524(J)
renormalization of scalar, using $\beta$-formalism, 6: 2547(J)
renormalized S-matrix for scalar, 6: 4679(J)
reversibility, 6: 1058(J)
Riesz potential, and mass of a photon, 6: 5708(J)
selection rules imposed by charge conjugation and charge symmetry, 6: 5923(J)
solutions for Schroedinger equation of two-electron systems in excited states, 6: 6659(J)
spontaneous light emission in unitary, 6: 4290(J)
theory of Lamb shift and anomalous magnetic moments, 6: 1054(J)
theory of electrons, 6: 621(J)
threshold for particle creation in, 6: 1942(J)
transformation of evolution equation in, 6: 3450(J)
unitary transformation of Hamiltonian for free Dirac particle, 6: 292
vacuum polarization in electron-field interaction, 6: 2239(J)
Quantum mechanics
(See also Mathematics; Physics; Quantum electrodynamics.)
analogy between Hamilton-Jacobi theory and eigenvalue problems, 6: 4295(J)
angular momenta of nuclei, 6: 3351
Quantum mechanics (cont'd)
applied to crystal and molecular theory, 6: 6674(R)
book: Fundamentals of, 6: 749
bound states and the interaction representation, 6: 5709(J)
boundary conditions and time-dependent states, 6: 682(J)
canonical formulation of relativistic, 6: 4286(J)
conservation of parity in boson interaction, 6: 2546(J)
detailed balancing principle in, 6: 2232(J), 5858
Dirac's singular functions and Schwartz's distribution theory, 6: 5000(J)
equations of motion and conservation theorems, derivations of, 6: 637(J)
equivalence of S-matrix in different representations, 6: 2231(J)
in Fock space, 6: 683(J)
forced harmonic oscillation in, 6: 1370(J)
Franck-Condon principle applied to, 6: 5240
general theory of damping in, 6: 5001(J)
group representation and parity conservation, 6: 5245(J)
of hydrogen atom, 6: 1060(J)
interpretation, by probability theory, 6: 4285(J)
interpretation, in terms of "hidden" variables, 6: 2235(J), 2236(J), 3729(J)
invariant forms of 4 Dirac wave functions, 6: 1063(J)
irreducible wave equations of arbitrary-spin particles, 6: 4288(J)
isotopic spin of $V^0$ particle, 6: 3322(J)
parity limitations of quantum-mechanical states, 6: 6488(J)
perturbation calculations in, 6: 2706(J)
perturbation theory in, 6: 1502(J)
of phosphorescence, 6: 1363(J)
physical interpretation and hidden variables, 6: 5527(J)
point transformations in, 6: 2550(J)
potential determined from asymptotic phase, 6: 5241(J)
problem of three bodies in, 6: 4296(J)
quantized field, divergence difficulties of, 6: 3624(J)
relation to classical mechanics, 6: 1938(J)
relation to deterministic theories, 6: 1367(J)
relativistic theory of spin, 6: 457(J)
relativistic two-body problem, 6: 3139(J)
representation of wave equations of spin-0 or spin-1 particles, 6: 3452(J)
scattering of quanta by electrons, 6: 1034(J)
scattering theory in, 6: 4648(J)
second-quantized theory of spin-$\frac{1}{2}$ particles in nonrelativistic limit, 6: 3878(J)
solutions for Schroedinger equation of 2-electron atoms, 6: 1063(J)
statistical distribution of particle movements in, 6: 2551(J)
in study of electronic energy of lithium hydride, 6: 1303(J)
theory of particles of arbitrary spin, 6: 1059(J)
thermodynamic functions in, 6: 3728(J)
virial theorem for Dirac particle in relativistic, 6: 4284(J)
wave functions in momentum space, 6: 1936(J)
wave functions for symmetrical top, 6: 4296(J)
Quantum physics
(See Nuclear physics.)
Quartz
(See also Fused silica; Sand; Silicon oxides.)
absorptive properties, 6: 251(R)
decoloration kinetics of pile-irradiated, 6: 4980(J)
structure of, neutron and x-ray diffraction study, 6: 2102
zeta potentials of, in solutions of sodium laurate, sodium oleate, and NaCl, 6: 5368(R)
Quenching circuits
for parallel-plate counters, design, 6: 942(J)
Quinaldine
acylation to ketones, 6: 6580
Quinhydrones
polarographic behavior, 6: 1638
Quinoline, 4-methyl-2-phenyl-
synthesis, 6: 91(R)
Quinoline oxalate
formation of radioactive naphthalene and other compounds from, by Szilard-Chalmers reactions, 6: 1167(J)
Quinolines
acylation reactions with phenyl lithium intermediate, 6: 6300(R)
8-Quinolinol chelates
chemical stability, 6: 1632
8-Quinolinol, 2-methyl-
complexes with Co, Cu, Mg, Mo, Ni, Tl, V, and Zn, 6: 1141(J)

R

Rabbits
hyperglycemia in, radioinduced, 6: 4697(R)
Racah coefficients
tables of, 6: 3352

**Radiation**
(See also specific radiations, e.g., Alpha particles, Beta particles; see also Radioactivity and specific radiation emission, e.g., alpha emission as subheading under specific materials; see also Accelerators; Nuclear particles; Nuclear reactions; Nucleons; Radiation detection instruments; Radiation sources; Shielding.)
absorber theory of, ◊: 4996(J)
absorption of polyenergetic, matrix methods applied to, ◊: 2761, 2773
angular correlation, geometrical correction of measurements, ◊: 6479
angular correlation, statistical matrix techniques applied to, ◊: 6115
angular correlation functions of, asymptotic behavior, ◊: 350(J)
angular correlation of successively emitted, theory, ◊: 2745(J), 4287(J)
angular distribution, use of photographic densitometry for measurement of, ◊: 1292(J)
angular momentum coefficients appearing in directional correlation functions for nuclear, ◊: 3716(J)
from an atomic bomb explosion, dominant chlorophyll mutant induced by exposing wheat seed to, ◊: 6265(J)
attenuation in air, ◊: 5716(R)
average velocity of energy transfer in ionized medium, ◊: 6393(J)
bacteremia induced by, role of intestinal flora in, ◊: 5547
bactericidal action of ionizing, lethal-mutation hypothesis, ◊: 6499(J)
biological effects, ◊: 53(J), 1095
biological effects, bibliography on, ◊: 5549, 6500(J)
biological effects, dependence on rate of energy loss, ◊: 6500(J)
biological effects, mechanism of, ◊: 2571(J)
biological effects, physical aspects of, ◊: 2259(J)
biological effects, review of, ◊: 3489, 3914(J), 4370(J), 5264
biological effects, role of formation of $H_2O_2$ in, ◊: 3738
biological effects, theory, ◊: 3740(J)
biological effects of total-body irradiation of mice, correlation with physical factors, ◊: 6498
cataracts induced by, ◊: 2271(J)
chain mechanism of damage by, ◊: 768(J)
color-center production in borosilicate glass by, ◊: 1419(J)
continuous monitor for airborne particulate, design, ◊: 6127(J)
from cyclotron, occurrence of bilobed lymphocytes following exposure to, ◊: 5011
cytological effects on invertebrates, ◊: 1381(J)
cytological effects on rabbit thymocytes, ◊: 2563
cytological effects on spleen, ◊: 5259
damping, covariant theory of, ◊: 3879(J)
destruction of thyroid gland by, ◊: 2257(J)
detection and measurement, ◊: 1(R)
detection and measurement, review of techniques used, ◊: 2437(J)
detection on paper chromatograms, ◊: 4877(J)
dosage determination, ◊: 2253(R), 4355, 5267, 5549, 5716(R)
dosage determination, from metabolized isotopes, ◊: 501(R)
dosage determination, instruments for, ◊: 6512(R)
dosage determination in treatment of skin diseases, ◊: 64(J)
dosage determination in a water phantom, ◊: 680(R)
dosimetry in atomic warfare, ◊: 2269
effects of electromagnetic, on mating reaction of Paramecium, ◊: 6241
effects of internal, on blood coagulation as measured by prothrombin consumption test, ◊: 6250(J)
effects on adrenaline, enzymes and isolated mammalian heart, ◊: 2557(R)
effects on adult mammalian nervous system, ◊: 3485
effects on animal cells, ◊: 3491(J)
effects on antibody formation, ◊: 2251
effects on capillary permeability, ◊: 3210(J)
effects on cell division, ◊: 6500(J)
effects on enzymogenesis, ◊: 2565
effects on eyes of rabbits, ◊: 505
effects on genetic factors affecting adaptive values in populations of Drosophila, ◊: 5546
effects on immunity of rats to bartonellosis, ◊: 4694(R)
effects on Fe concentration in blood serum, liver, spleen and kidneys, ◊: 4363(J)
effects on level of serum polysaccharide in neoplastic diseases, ◊: 6505(J)
effects on lipoprotein metabolism, ◊: 38
effects on liver, studies using $Au^{198}$, ◊: 5266
effects on lung clearance of insoluble foreign particles, ◊: 5552
effects on maternal behavior and maze performance of rats, ◊: 5551
effects on mortality rate of rabbits fed tapioca dextrin, ◊: 1617
effects on plant growth, studies with fertilizer containing $P^{32}$, ◊: 4364(J)
effects on release of heparin in anaphylactic shock, ◊: 5718(J)
effects on small intestine, ◊: 35
effects on sulfhydryl content of blood plasma, ◊: 1593
effects on tissue cultures and on induction of tumors, ◊: 4689(R)
effects on universal reaction in cancer, ◊: 2812(J)
**Radiation (cont'd)**
effects on universal reaction in polycythemia, ◊: 2813(J)
effects on universal serologic reaction, ◊: 6496(R)
from electrons in synchrotron, theory, ◊: 3328(J)
emission of quadrupole, in neutron-deuteron capture, ◊: 2202(J)
energy dissipation of ionizing, in liquids, ◊: 4707(J)
energy loss of relativistic charged particles by ionization, polarization effects, ◊: 6699(J)
fluorescence produced by, in organic substances, ◊: 5159(J)
from $Ga^{72}$, physiological effects of, ◊: 527
genetic effects, review, ◊: 4371(J), 5717, 5910(J), 5955(J)
genetic effects on bacteria, ◊: 1086
genetic effects on barley and wheat, ◊: 2262(J)
genetic effects on maize seed, ◊: 774(J)
genetic effects on mice, ◊: 5017(J)
genetic effects on paramecia, ◊: 140
genetic, morphological, and physiological effects on plant nuclei, ◊: 1949
health physics aspects of, ◊: 781
hematological effects, ◊: 1598
histological and cytological effects of $\alpha$ and x radiation on skin of mice, ◊: 2267(J)
histological and histochemical effects on animal cells, ◊: 2252
histological effects on barley plants, ◊: 3164(J)
histological effects on plants and rats, ◊: 1595
hyperglycemia induced by, in rabbits, ◊: 4697(R)
indirect action on aqueous solutions, survey applied to biological systems, ◊: 4708(J)
indirect effects on blood vessels, ◊: 1600
inelastic scattering of, angular distribution of $\gamma$ rays following, ◊: 5675(J)
interactions in scintillation detectors, localization of, ◊: 2707
interactions with matter in the region of optical resonance, ◊: 1361(J), 3429(J)
ionization loss of, density effect for, ◊: 5503
lateral distribution of ions across tracks of ionizing particles, ◊: 2412(J)
lethal and mutagenic action on fungi, mechanism, ◊: 4365(J)
lethal effects, influence of blood dialysis on, ◊: 1378
lethal effects on cells, ◊: 771(J)
low energy range-energy relations, cloud chamber studies of, ◊: 4582
malformations in embryos and fetuses induced by, ◊: 2572(J)
maximum permissible exposure limits, a concept for establishing, ◊: 3914(J)
morphological effects on senna plant exposed to atomic bomb explosion, ◊: 6268(J)
motion-picture film on properties, ◊: 5458(J)
multiple elastic scattering and damping of, ◊: 3419
multiple scattering, theory, ◊: 383, 2206(J), 2517(J)
multiple scattering, theory as applied to cloud-chamber measurements, ◊: 5496(J)
multiple scattering by parallel cylinders, theory, ◊: 3704(J)
multiple scattering of charged, study in photographic emulsions, ◊: 4239(J)
natural atmospheric, measurement, ◊: 6711
pathological effects on burros, swine, rabbits, and cattle, ◊: 5940(R)
pathological effects on intestine, ◊: 5545
permissible dosage and review of biological effects, ◊: 1376
permissible limits, ◊: 6512(R)
permissible limits, lecture on, ◊: 1095
physiological and genetic effects on female Drosophila, ◊: 5263
physiological effects, ◊: 3896(R)
physiological effects on eggs and sperm of sea urchin, ◊: 3486
physiological effects on ground squirrels, ◊: 5550(R)
physiological effects on rats, ◊: 1595
products of ionizing, diffusion and recombination of, ◊: 2260(J)
radiative correction to form and breadth of emission line, ◊: 5485(J)
radiative transfer, variational method for problems of, ◊: 6406(J)
ranges in materials, ◊: 4641
reduction of potassium iodate by, effects of oxygen on, ◊: 5343(J)
scattering, application of computers to variational calculation of, ◊: 2993(R)
scattering, bound states and the interaction representation in theory of, ◊: 5709(J)
scattering, quantum theory of, ◊: 1039(J)
scattering, variational principle in theory of, ◊: 5494(J)
scattering by electrons, theory, ◊: 1034(J)
scattering by metal foils, ◊: 398(J)
scattering by obstacles with spherical or circular-cylindrical symmetry, ◊: 4969(J)
scattering by a static potential, validity of Born-expansion treatment of, ◊: 5690(J)
scattering in a central field, ◊: 727(J)

Radiation (cont'd)
scattering in a magnetic field, 6: 1041(J)
scattering phases of, upper and lower bounds, 6: 719(J)
statistical errors of expansion coefficients of experimental angular distributions, 6: 5883(J)
sterilization of food and drugs by, 6: 2253, 2330(J), 2569(R)
sterilization of food and drugs by, prevention of side effects, 6: 5271(J)
systemic effects, formula for determining, 6: 6267(J)
tolerance levels, review, 6: 5910(J)
tumors induced by, types of, 6: 3177(J)
tumors of pituitary gland resulting from radiothyroidectomy followed by whole-body x irradiation, 6: 5938
uniform damage produced by, in solids, 6: 2974(J)

Radiation chemistry
(Covering chemical reactions and changes in chemical properties brought about by radiations; see also the property concerned and reactions under the element or material affected by the radiation; see also Radiochemistry.)
charge neutralization between positive and negative ions in, theory, 6: 3533
charge transfer mechanisms in, theory, 6:3532
development, application, possible uses of, review, 6: 833(J)
effects of $\alpha$, $\beta$, $\gamma$, and x radiation on organic compounds, bibliography on, 6: 6008
excited molecule theory for liquids, 6: 4000(J)
retention of recoil atoms, determination of initial energy by, 6: 6325(J)
utilization of fission products, bibliography on, 6: 916(R)

Radiation damage
(See also units, materials, tissues, organs, etc., exposed to radiations.)
evaluation in materials, x-ray-diffraction methods for, 6: 5504

Radiation detection instruments
(A complete instrument, not necessarily including the radiation detector component; classified according to the type of signal received from the detector component; see also Counting devices; Radiation detectors; Radiological telemetering systems; Rate meters; Scalers.)
calibration checking device for, 6: 662(J)
classification of, functional, 6: 5436(J)
conference on, 6: 631(J)
design and application, review, 6: 4587(J)
discriminating, design, 6: 4866
for environs monitoring, design and maintenance, 6: 5640
evaluation of, for measurement of radioactivity of $H_2O$, 6: 6512(R)
hand, foot, and clothing monitor, manual on design and operation of type 1027B (British), 6: 4580
kryptometer, photometric-dosimeter design, 6: 3912(J)
monitor and x-ray yield integrator for betatron, 6: 1799
for monitoring low-level radioactivity in water, 6: 4887(J)
motion-picture film on practical procedures of measurement with, 6: 5443(J)
for neutrons, using luminescent material to activate photocells, 6: 6221(P)
for plant assay in vivo, 6: 5164(J)
portable $\beta-\gamma$, 6: 313(J)
portable $\beta-\gamma$ type 1043D (British), manual for, 6: 3820
portable, stable, with automatic space charge, 6: 6234(P)
review, 6: 305(J)
velocity selector for background suppression in scintillation counting, 6: 4143
for very-short-wave radiations, review, 6: 2437(J)

Radiation detection instruments (colorimetric)
individual dosimeters, 6: 2135(R), 2136(R)
involving chloroform-alcohol-dye system, 6: 3003
with polyvinyl films containing methylviolet dye, for $\gamma$ ray dosimetry, 6: 660(J)

Radiation detection instruments (ion current type)
calibration, 6: 3765
clinical dosimeter using $CdSO_4$ crystal detector, 6: 6669(J)
clinical dosimeter using organic scintillators, design, 6: 6668(J)
design and performance, 6: 1802(R)
dosimeter for use in $\gamma$- or x-ray therapy, design, 6: 2446(J)
for dosimetric study of high intensity $\gamma$ sources, 6: 6662
individual quartz fiber dosimeters, manual (British), 6: 3822
NBS model 1 gamma survey instrument, design, 6: 3627
performance, 6: 5716(R)
performance of three commercial instruments, comparison, 6: 2153(J)
pocket dosimeter, design, 6: 3632
pocket dosimeter with reflecting elements to illuminate fiber and scale, optical design, 6: 1506(R)
portable, circuitry for, 6: 6223(P)
portable light-weight high-dosage, design and fabrication for field use, 6: 4871(R)

Radiation detection instruments (pulse type)
for alpha, $\beta$, $\gamma$, and neutron surveying, 6: 3479(P)
for alpha particles, design and operation manual, 6: 3821
amplifiers and pulse shapers for counting pulses of wide dynamic range, 6: 4145(R)
calibration, 6: 667(J)
circuits for testing, calibrating and displaying results, 6: 5440(J)
for continuous monitoring of drinking water, design, 6: 2429
for counting $\beta$ emitters in volatile liquid samples, 6: 3549(J)
for counting random pulses, 6: 303(J)
for gamma radiation, 6: 5417(R)
with liquid scintillators for neutron detection, design, 6: 6410
mount, electronics, and indicator for probe counter, 6: 5437(J)
for observation of short-lived activities, design, 6: 4932(J)
proportional, effect of high $\beta$ backgrounds on $\alpha$ counting with, 6: 6121
scintillation counter for low-energy electrons, design, 6: 6413(R)
scintillating crystal $\gamma$ counter, design and performance, 6: 4144
for selective response to components of cosmic radiation, 6: 5404(R)
for thermal neutron detection using enriched $B_2O_3$ and photomultiplier, 6: 6119

Radiation detectors
(See also Chemical radiation detectors; Cloud chambers; Crystal detectors; Fission chambers; Geiger-Mueller tubes; Ionization chambers; Metal foil detectors; Parallel plate detectors; Photographic film detectors; Photomultiplier tubes; Pocket chambers; Proportional detectors; Radiation detection instruments; Scintillation detectors.)
alpha-particle bench monitor, design, 6: 1805(J)
counters and ion chambers for detection and measurement of $\beta$ and $\gamma$ radiation, review, 6: 6129(J)
design and application, review, 6: 4587(J)
diamond $\alpha$-particle, effect of light on counting rate, 6: 4162(J)
filling with $BF_3$, technique, 6: 5151(J)
for health physics, lecture on, 6: 781
multiwire anticoincidence-counting, design, 6: 2442(J), 2443(J)
scintillation G-M tubes, response as function of source position, 6: 5165(J)
shielding, 6: 5695
statistical analysis, 6: 640(R)
system of Geiger counters and Cherenkov light detectors for counting heavy particles, 6: 5167(J)
utilizing bubble formation in superheated liquids, 6: 6419(J)
for very-short-wave radiations, design, 6: 2437(J)

Radiation effects
(See also as subheading under specific materials and organisms.)
decomposition of organic molecules in solution, mechanism for, 6: 5347(J)
on solids, bibliographies, 6: 5694

Radiation exposure chambers
containing fast neutron source at one end and $\gamma$ source at other, design, 6: 4689(R)
containing up to five separate $Co^{60}$ sources, design, 6: 5578
for exposing large animals to whole-body $\gamma$-radiation outdoors, 6: 5255(J)
to house a 100-curie $Co^{60}$ source, design, 6: 3344
ventilation of, mercury piston gas pump for, 6: 4849

Radiation injuries
(See also as subheading under organisms, organs, etc.; see also Radiation sickness.)
accidentally produced during therapy, 6: 42(J)
in amoeba, therapeutic effects of fusion, 6: 6244
to antibody response, localization, 6: 1375, 5257
bacteremia following, duration in mice, 6: 5548
of bacteriophages, effect of physical state on, 6: 4685
of bacteriophages, protective action of $(NH_4)_2SO_4$, 6: 4686
bibliography on, 6: 5549
caused by atomic bombs, review of types and treatments of, 6: 52(J)
caused by atomic bombs, therapy of, 6: 3150(J), 3151(J), 3152(J)
dietary factors affecting, 6: 5019(J)
effects of adrenalectomy on, 6: 507
effects of age on survival of mice with spleens shielded during irradiation, 6: 4689(R)
effects of atropine and related cholinergic blocking drugs on mortality of x-irradiated mice, 6: 5277
effects of obesity on, in mice, 6: 6251(J)
effects of pretreatment with cysteine followed by implantation of spleen after irradiation, 6: 4689(R)
effects of pretreatment with injected bone marrow on, 6: 4689(R)
effects of prolonged exposure to low environmental temperature on recovery from, 6: 4372
effects of temperature on, in bacteriophages, 6: 4684
effects on distribution and excretion of electrolytes, 6: 2292(J)
effects on N balance, 6: 5265
effects on resistance to infections, 6: 5541(R)
effects on response to anoxia, 6: 3490

**Radiation injuries (cont'd)**
from fission products deposited in bone, prophylaxis with salts of (ethylenediamine)tetraacetic acid, δ: 5951
hematolgical factors affecting, δ: 1964
hydrogen peroxide in, role of, δ: 5550(R)
kinetics of, formula for determining, δ: 4355, 5267
mechanism of lethal, δ: 3176(J)
modification with pharmaceuticals, δ: 6515
physiological and pathological patterns for various species of mammals, δ: 4361(J)
prophylaxis with Benemid, δ: 520(R)
prophylaxis with biological and pharmacological agents, review, δ: 1380
prophylaxis with bone marrow injections, δ: 57(J)
prophylaxis with bone marrow injections and citrate, δ: 2562
prophylaxis with chemical agents, mechanism of, δ: 47, 53(J)
prophylaxis with chemical agents, review, δ: 3913(J), 3917(J)
prophylaxis with chemical agents, role of enzymatic $O_2$ removal in, δ: 5280(J)
prophylaxis with cobalt in the diet, δ: 3181
prophylaxis with cyanide, azide, and malononitrile, δ: 51(J)
prophylaxis with cysteine, δ: 1379(R), 1608, 5553
prophylaxis with cysteine and mercapto group, δ: 5716(R)
prophylaxis with cysteine, ascorbic acid, and thioglycolic acid, δ: 3495(J)
prophylaxis with cysteine, glutathione, thiourea, ascorbic acid, methylene blue, and vitamin $B_1$, δ: 6277(J)
prophylaxis with cysteine, mono-thioglycerol, glycerin, and propylene glycol, δ: 3888(R)
prophylaxis with ethanol, δ: 3500
prophylaxis with ethanol, $N_2$, $Na_2S_2O_4$, sodium formate, and starvation, δ: 48
prophylaxis with ethanol, $Na_2S_2O_4$, BAL, sodium formate, low oxygen tension, and starvation, δ: 46
prophylaxis with flavonoids, δ: 3502(J)
prophylaxis with Loiseleur's solution, δ: 3917(J)
prophylaxis with morphine sulfates, δ: 1963(J)
prophylaxis with serotonin and p-aminopropiophenone, δ: 5948
prophylaxis with sodium arsenate, mercuric chloride, dibenamine, p-hydroxydiphenyl, and cysteine, δ: 2557(R)
prophylaxis with sodium nitrite, δ: 23, 5956(J)
prophylaxis with sulfhydryl compounds, reducing compounds, respiratory inhibitors, alcohols, glycols, carboxylic acids, and sugars, δ: 49
prophylaxis with sulfhydryl compounds, sulfhydryl inhibitors, and oxygen, δ: 6276(J)
prophylaxis with terramycin, δ: 50
prophylaxis with thymonucleic acid, δ: 5016(J)
radiation dosage causing, relationship of body weight to, δ: 2563
recovery from, evidence for a humoral factor in, δ: 4375(J)
from synergistic action of radioisotopes, δ: 33
therapy by blood dialysis in vivo, δ: 1378
therapy of blood dyserasias resulting from, bibliography on, δ: 6278(J)
therapy of ulcerated radiodermatitis of nucha, with placental extract, δ: 2822(J)
therapy with antibiotics, δ: 3888(R)
therapy with aureomycin and whole blood separately and in combination, δ: 5273(J)
therapy with blood transfusions, δ: 6516(J)
therapy with bone marrow injections, δ: 6278(J)
therapy with chemical agents, literature survey and bibliography, δ: 1967(J)
therapy with cortisone in mice, δ: 6274(J)
therapy with cysteine, thiosorbitol, monothio-glycerol, and glycerin, δ: 4357(R)
therapy with homogenates of spleen from non-irradiated animals, δ: 2824
therapy with injected lymphocytes, δ: 1612
therapy with injections of mashes and extracts from tissues, δ: 6270(R)
therapy with lipoprotein-nucleic acid complexes, δ: 1962(J)
therapy with rutin, δ: 4699(R)
therapy with tissue fractions in amoebae, δ: 5550(R)
therapy with tissue homogenates, cysteine, and ascorbic acid, δ: 520(R)
therapy with tissue transplants, effects of strain specificity on, δ: 4709
therapy with urinary extract, δ: 4710
from x-ray diagnosis, prevention of, δ: 5952(J)
from x rays used in pediatrics, δ: 2823
**Radiation Lab., Univ. of Calif., Berkeley**
progress reports of medical and health physics divisions, δ: 495(R), 2808(R), 3155(R), 6269(R)
progress reports of physics division, δ: 1821(R), 3580(R), 5454(R)
**Radiation monitoring**
(See also appropriate subheadings under specific sites; for monitoring of personnel see also Radiation protection.)
of atmosphere, design of instrument for, δ: 5438(J)
equipment and organization of Radiological Monitoring Team at BNL, δ: 5022
of Hiroshima western suburb following atomic explosion, δ: 6490(J)
manual for radiation detection instruments and maintenance, δ: 5640
of streams, δ: 6272(J)
**Radiation protection**
(General aspects of the problem concerning personnel; see also Health physics; Radiation detection instruments; Remote control equipment; Shielding.)
industrial, review, δ: 4378(J)
during x-ray diagnosis, δ: 5952(J)
of x-ray technicians in hospitals, δ: 1096(J)
from x-rays of electron-beam instruments, δ: 783(J)
**Radiation shielding**
(See Shielding.)
**Radiation sickness**
(See also the subheading biological effects under Radiation and under the specific radiations; see also physiological headings, e.g., Anemia, Blood picture, Skin; see also Radiation injuries.)
in dogs, symptoms and development, δ: 5028(J)
effects on healing of scars from burns or other causes, δ: 6257(J)
from exposure to single doses of total-body ionizing radiation, case histories, δ: 3920(J)
hemorrhagic phase, δ: 3918(J)
mechanism and clinical observations on, caused by grenz rays, δ: 2264(J)
symptoms, δ: 3503(J)
symptoms and treatment of, caused by atomic bomb explosions, δ: 1588(J)
symptoms, pathology, and treatment, δ: 1097
syndrome of, study of nine cases, δ: 2273(J)
therapy, review of current concepts, δ: 3503(J)
therapy with ACTH, δ: 58(J), 1965(J)
therapy with Aldinamide, and Rimifon and Marsilid, δ: 5541(R)
therapy with antibiotics, δ: 784, 2567, 4698(R)
therapy with antihistamines and vitamins, δ: 3919(J)
therapy with aureomycin and whole blood, δ: 516(R)
therapy with benadryl, benzedrine, pyridoxin, and hydrochloric acid, δ: 1966(J)
therapy with 2-mercapto-ethylamine, δ: 3921(J)
therapy with terramycin, δ: 3187
therapy with vitamin $B_{12}$, δ: 55(J)
**Radiation sources**
(See also sources of specific radiations, e.g., Alpha sources; see also Radioapplicators.)
geometry, δ: 650(R)
installation and testing, δ: 2039
optimum dimensions for, calculations, δ: 3295(R)
preparation of β ray eye applicators, δ: 5716(R)
preparation of radioactive plastic microspheres, δ: 5932(J)
transformation from disk to point geometry, δ: 2793
**Radiation target cans**
design and welding, δ: 423(J)
**Radiation target theory**
applied to inactivation of catalases by fast deuterons, δ: 1602(J)
applied to radiation effects on bacteriophages, δ: 4685
discussion on basis of Markov chains, δ: 2573(J)
**Radiation targets**
assembly for irradiation of liquids, δ: 496(R), 5211(J)
calibration, δ: 5657(R)
centrifugal-pump target assembly for cyclotron irradiation of liquids, δ: 3156(R), 4562
movement of, effect on neutron cross sections, δ: 3385(J)
nuclear stability of, effect on nuclear reactions, δ: 3388(J)
pistol-grip type holder for, design, δ: 3580(R)
preparation of, for producing radioisotopes, δ: 1584(P)
preparation of, using target elements Al, $B^{10}$, $B^{11}$, $N^{15}$, deuterium and tritium, δ: 2759
preparation of $H^3$-Zr, for accelerators, δ: 3414(J)
preparation and storage of Li, δ: 536
preparation of Mg, from MgO, δ: 4121
radioautographic analysis of, for determination of particle distribution in cyclotron beams, δ: 3693
sample mounting mechanism for holding, for use with 1.25-Mev Van de Graaff accelerator, δ: 3413
testing of thin tritium, δ: 3387(R)
**Radicals**
(See also specific radicals, e.g., Hydroxyl radical.)
$Bi^{210}$ as indicator in study of, δ: 3548(J)

Radio well logging
(See Well logging.)
Radioactivation analysis
(See Radiometric analysis.)
Radioactive contamination
(See also subheading contamination under materials and units contaminated; see also Stack disposal; Waste disposal.)
control, lecture on, 6: 781
control and removal in laboratories, handbook, 6: 4374(J)
of metal surfaces by $I^{131}$ in solution, 6: 883
Radioactive elements
abundance and distribution, bibliography, 6: 5780(J)
Radioactive isotopes
(See Radioisotopes.)
Radioactive materials
handling, biological, physical, and administrative problems in, 6: 3812
handling, conveyer for BEPO radiation cans, 6: 5134
handling, manual from Bureau of Medicine and Surgery, Dept. of the Navy, 6: 5721
handling, symposium on, 6: 6510
location of buried, efficient search procedures for, 6: 5370(J)
viewing box for, 6: 4314(P)
Radioactive minerals
(See also specific radioactive minerals by name.)
absolute ages of, from Appalachian region, 6: 4065(J)
age estimations of, method for, 6: 3283(J)
aerial prospecting for, 6: 590(J)
crystal structure destruction of, radioinduced, 6: 1225(J), 2078(J)
distribution in thin sections, radioautographic study, 6: 4500(J)
photographic film in study of, preparation, 6: 3638(J)
radiometric analysis of 5 to 10 mg samples, 6: 4499(J)
Radioactive ores
(See also specific radioactive ores by name, e.g., Uranium ores.)
aerial prospecting for, instrument performance in, 6: 6596
mechanical beneficiation, electronic circuits for La Pointe picker used in, 6: 5775
prospecting for, in the Soviet Union, 6: 216(J)
uranium and Th content of, determination with photographic film detectors, 6: 3366(J)
Radioactive waters
in Jordan, 6: 6600(J)
radiological monitoring, instruments for, 6: 4373(R)
of Switzerland, tabulation of activities of, 6: 6719(J)
therapeutic uses, 6: 524(J)
Radioactivity
(See also appropriate subheadings under specific isotopes and elements; see also subheadings for specific radiations emitted, e.g., gamma emission; see also main headings for radiations and particles, e.g., Alpha particles; Gamma radiation.)
assay in tracer work, review, 6: 6340
in the atmosphere, measurement, 6: 4264(J)
deposits at Ottawa, Canada, following atomic explosions, 6: 3714(J)
determination on filter paper chromatograms, 6: 4157(J)
distribution in atmosphere, 6: 3125(J)
distribution in rocks and meteorites, 6: 2789(J)
of fission products, nomograms for calculating, 6: 406
heavy collateral radioactive chains, 6: 2533(J)
motion-picture films on fundamentals of, 6: 5512(J)
of ocean and river sediments, 6: 3113(J)
permissible limits in air, 6: 1611
permissible limits in drinking water, 6: 2429
in snow on Puy de Dome, France, 6: 1358(J)
theory, 6: 3112(J)
Radioapplicators
(See also Radiation sources.)
for beta irradiation of eyes, calibration, 6: 5716(R)
for beta particles, comparison of, 6: 304(J)
for cobalt ($Co^{60}$), in therapy of female genital tract carcinomas, 6: 3189
for colloidal $Au^{198}$ design, 6: 2275(J)
Curtis F. Burnam tube, therapeutic uses of, 6: 3165(J)
design, 6: 525(J)
design and performance, 6: 504(R)
for irradiation of markedly re-entrant cavities, design, 6: 3197(J)
optimum dimensions for, calculations, 6: 3295(R)
plaques for treatment of corneal lesions of dogs with $Sr^{90}$, design, 6: 6284(J)
preparation and calibration of $\beta$-emitting plaques, 6: 4702(J)
preparation of radioactive glass beads as, 6: 625(R)
preparation of radioactive plastic microspheres, 6: 5932(J)
thin-walled glass needles as, 6: 633(J)
Radioautographic analysis
(See also as subheading under specific materials.)
of bones and teeth, for $P^{32}$, 6: 3504(J)
Radioautographic analysis (cont'd)
with gel-type emulsions, in study of rocks, 6: 3005(J)
of thorium- and U-containing materials, 6: 1809(J)
Radioautography
(See also appropriate subheadings under specific materials and specific radioactive isotopes; see also Nuclear emulsions; Radiography.)
applications of, bibliography on, 6: 1977(J)
applied to study of distribution of radioactive minerals in thin section, 6: 4500(J)
in biological investigation, 6: 5283
biological techniques and applications, review, 6: 3923(J)
in cancer, a review, 6: 1977(J)
distribution of particles in cyclotron beam, determination by, 6: 3693
of entire chest following $I^{131}$ administration, in localization of metastatic lesions, 6: 6280(J)
in estimation of growth rate of various parts of the bone, 6: 2842(J)
gamma-ray pinhole camera for use in, 6: 521, 2574
identification of $\beta$-active particles in aerosols by, 6: 3307
of individual cells, 6: 5040(J)
of large undecalcified bones, 6: 5029(J)
localization of isotopes in tissues by, method for, 6: 5293(J)
measurement of nucleic acids by, 6: 149
in nuclear metabolism studies, techniques, 6: 5957(J)
with phosphorus ($P^{32}$) and $S^{35}$ in plants, 6: 795(J)
in study of Ra deposition in human skeleton, 6: 5555
techniques using At and I simultaneously, 6: 496(R)
techniques which also allow staining of the tissue, 6: 6291(R)
tissue preparation for, combined calcified and soft tissues, 6: 3188
tissue preparation for, evaluation of freeze-drying and dry-cutting techniques, 6: 5282
tritium in, 6: 61(J)
Radiochemical processing plants
instrument needs of, 6: 1705
Radiochemistry
(Covering general theory and experimental techniques of the chemistry of radioactive materials; see also as subheading under specific materials.)
book: Radioactivity Applied to Chemistry, 6: 2623(J)
history of, with emphasis on Otto Hahn's discoveries, 6: 1675(J)
physicochemical laws in infinitely dilute solutions, 6: 2622(J)
radiochemical pilot plant development at ORNL, 6: 2633
Radiocolloids
(See Colloids.)
Radiofrequency oscillators
design of, for measuring reaction rates, 6: 4120
Radiography
(Photographic processes involving the use of x and gamma radiations from external sources; see also Radioautography; Radiographic analysis; see also as subheading under the specific device or material studied.)
alignment errors in, elimination of, 6: 62
beta and $\gamma$, applications and source availability, 6: 4772(J)
betatron, techniques for, 6: 3277
dental, protection of patient and operator during, 6: 6273(J)
depth determinations by x-ray photography, 6: 522(J)
diagnostic, determination of x-ray dosage received during, 6: 6275(J)
diagnostic, radioisotopes emitting low-energy $\gamma$ rays in, 6: 2825(J)
electron, theory and applications of, 6: 1778
equipment for, design and operation, 6: 3922
functional studies with labeled contrast media, 6: 4377(J)
instruments for measuring secondary radiation during, 6: 6271(J)
materials and methods for, 6: 477(P)
method for producing two separate negatives of a constant registry autoradiogram, 6: 3924(J)
oral, hazards to hands during, 6: 6254(J)
oral, x-ray dosage to patients during, 6: 5950
penetrameters for measuring sensitivity of radiographic inspection, evaluation, 6: 6661
techniques for reducing radiation dose in x-ray examination of chest, 6: 5021
tissue sample preparation for, combined calcified and soft tissues, 6: 3188
x-ray and electron, of thin specimens, 6: 1971
Radioisotopes
(See also specific radioactive isotopes.)
applications of industrial significance, 6: 2986
applications to biochemical and medical research, bibliography, 6: 5728(J)
applications to biochemical studies, review, 6: 73
applications to metallurgy, bibliography, 6: 5787(J)
applications to soils research and plant nutrition, bibliography, 6: 5726(J)
assay and standardization of, techniques and instruments, 6: 6128(J)

Radioisotopes (cont'd)
availability and recent uses for cancer research, 6: 3948(J)
betatron-induced low-Z, of short half life, search for, 6: 5682(J)
detection and measurement in medical research, review, 6: 2149(J)
determination of tracers in presence of their daughters, 6: 1432
diagnostic and therapeutic uses as applied to surgery, 6: 2826(J)
dosimetry units in internal therapy, 6: 3196(J)
in entomological research, 6: 4723(J)
half lives, apparatus and method for measuring, 6: 3473(P)
half lives, method for measuring, 6: 5646(J)
handling, conveyer for BEPO radiation cans, 6: 5134
handling, protective measures for, 6: 3741(J)
handling, review of precautions, 6: 5953(J)
handling and storage, 6: 3183(J)
identification and yields from ($\gamma$,$\alpha$n) reactions, 6: 3687
industrial uses, bibliography on, 6: 2985, 4859
measurement and handling of, for therapeutic uses, 6: 525(J)
medical uses, for therapy and tracer studies, 6: 3949(J)
metabolism and excretion, 6: 501(R)
motion-picture film on handling, 6: 5281(J)
motion-picture film on measurement of activity, 6: 5443(J)
motion-picture film on methodology in tracer applications, 6: 2840(J)
motion-picture film on tracer applications in metallurgy, chemistry, biochemistry, and plant physiology, 6: 5357(J)
motion-picture film on tracer uses in agriculture, 6: 5294(J)
nuclear properties of, measurement by microwave spectroscopy, 6: 1928
oral administration of, capsules for, 6: 5031(J)
permissible limits for human body, $H_2O$, and air, 6: 6512(R)
physical, chemical, and industrial applications, 6: 305(J)
production, methods of calculating yields in chains of successive nuclear transformations, 6: 5475
production, review of methods, 6: 1853
production, target arrangement for, 6: 1584(P)
production and availability for medical use, from Isotope Division at Harwell and Radiochemical Center at Amersham, England, 6: 6109(J)
production in Zoe reactor, 6: 1325(J)
reactor-produced, preparation and distribution in England, 6: 5143(J)
spectrographic analysis, 6: 443
synergistic lethal action in mice, 6: 33
synthesis of compounds labeled with, at Radiochemical Center, Amersham (England), 6: 5976(J)
therapeutic internal uses, symposium on, 6: 5030(J)
therapeutic uses, by iontophoretic concentration, 6: 3193(J)
therapeutic uses, review, 6: 1972(J), 2829(J)
tracer applications, bibliography, 6: 5763(J)
tracer techniques using, applied to tissue culture, 6: 797(J)
Radiological defense
(See also Civilian defense; Radiological warfare.)
equipment and organization of Radiological Monitoring Team at BNL, 6: 5022
medical aspects, 6: 1587(J), 1588(J)
salvaging of food, 6: 5023(J)
Radiological monitoring
(See as subheading under specific materials and devices.)
Radiological Research Lab., Columbia Univ.
progress reports, 6: 5716(R)
Radiological telemetering systems
design of f-m audio oscillators for, 6: 1783
Radiological warfare
(See also Civilian defense; Radiological defense.)
effects on government and legal systems, 6: 1065(J)
gamma dosimetry in, as a criteria for management of casualties and psychological reassurance of survivors, 6: 2269
medical aspects, lecture on, 6: 1376
military aspects, 6: 1587(J)
Radiology
history of standardization in, 6: 1098(J)
techniques in abdominal, 6: 3172(J)
Radiometric analysis
(See also as subheading under specific materials.)
apparatus for, 6: 4327(P)
methods for identifying constituents of radioactive mixtures, 6: 4303(P)
methods of, review, 6: 3759(J)
sample preparation for, 6: 512(J), 965(J), 968(J)
silicones as an aid in preparation of counting samples, 6: 4890(J)
Radiometric well logging
(See Well logging.)
Radiosensitivity
(See also as subheading under specific organs and organisms.)
of abdomen, in rats, 6: 6267(J)
effects of acetal phosphatides content of tissues on, 6: 6506(J)
effects of age of salmon eggs on, 6: 5933(R)
Radiosensitivity (cont'd)
effects of antibiotic therapy, isopropylamine and acetate on, in rats, 6: 2559(R)
effects of azide and hydroxylamine on, of tumors and of intact animals, 6: 6262(J)
effects of cysteine and plasma on, 6: 2564
effects of hypothermia on, in infant mice, 6: 3153
effects of O, thiourea, thiouracil, and Na maleate on, in mice, 6: 6276(J)
effects of sodium pentobarbital anesthesia on, 6: 1959(J)
effects of sodium salicylate on, 6: 3915(J)
effects of temperature on, 6: 44(J), 3895(R)
of fetuses, at various developmental stages, 6: 6494
mechanism of acquired radioresistance in cancer therapy, 6: 3154
to mutation production and survival, effect of oxygen tension on, 6: 5025(J)
oxygen factors, in mice, 6: 3153
of roots, as affected by O dissolved in the surrounding water, 6: 2955(J)
of transplanted rat tumors, effects of flavones administered before and after irradiation on, 6: 6285(J)
Radiotherapy
(See also as subheading under conditions treated; see also subheadings biological effects under specific radiations, and therapeutic uses under specific radioactive isotopes.)
of brain tumors, with $B^{10}$, 6: 2828(J), 5287(J)
capsules for oral administration of radioisotopes, 6: 5031(J)
cesium ($Cs^{137}$) in, possibilities of, 6: 2274(J)
with cobalt ($Co^{60}$) source, 6: 1102(J)
with cobalt ($Co^{60}$) teletherapy units, room-protection measurements for, 6: 5033(J)
colloidal $Au^{198}$ in palliative treatment of patients with malignant pleural and peritoneal effusions, 6: 5962(J)
of corneal lesions in the dog with $\beta$ radiation from $Sr^{90}$ plaques, 6: 6284(J)
deuteron beams and $\alpha$ particles in, 6: 3194(J)
dosage rate calculations in, 6: 6283(J)
dosimeter for, design, 6: 2446(J)
dosimetry units in internal, 6: 3196(J)
handling of $Au^{198}$ in, 6: 5032(J)
internal, symposium on use of radioisotopes in, 6: 5030(J)
ionization chambers for soft-x-ray dosimetry in, 6: 4878(J)
of lung cancer by intracavitary administration of $Au^{198}$ following pneumonectomy, 6: 5959
response of human tissues to, and differentiation following, 6: 1973(J)
teletherapy unit using $Co^{60}$ as $\gamma$ source, design and construction of 1000-c, 6: 5289
teletherapy units for, design of multicurie, 6: 5960
of thyroid cancer using $I^{131}$, 6: 5961(J)
of tumors, methods and equipment for dispersion of a calculated dose of colloidal $Au^{198}$, 6: 6289(J)
of tumors, relative effects of $\alpha$, $\beta$, $\gamma$, and neutron radiation, 6: 4713
Radium
alpha spectra, 6: 428(J)
chronic toxicity, comparison with Pu, 6: 3936
concentration in ocean and river sediments, 6: 3113(J)
decay schemes, 6: 444(R)
deposition in human bone, radioautographic studies, 6: 5555
determination of $\mu\mu$g quantities in urine, 6: 2313(J)
dosage determinations and physiological effects in humans, 6: 2563
effects of injected, on alkaline phosphatase activity, 6: 28
effects on excretion and white blood count, 6: 775(J)
effects on plant growth, 6: 3902(J)
electron configurations, 6: 5116
excretion, 6: 4696(R)
gamma spectra, from energies of Be photoneutrons, 6: 4180
handling, safety measures for, 6: 5024(J)
measurement of finger and hand doses of radiation from, 6: 1960(J)
occurrence in municipal water supplies, 6: 510(R)
plant uptake and storage, 6: 3886(J)
radiometric determination in residues dissolved in $H_3PO_4$, 6: 3751
tissue distribution, pathological effects, and therapeutic uses of, 6: 63(J)
toxicology, 6: 526(R), 787
in treatment of nasopharynx, case histories of 85 patients reexamined from 3 to 29 years after treatment, 6: 3897(J)
Radium isotopes
(Isotopes identified as RaC, etc., have been indexed as in the table below.)
RaC Bismuth isotopes $Bi^{214}$
RaC′ Polonium isotopes $Po^{214}$
RaD Lead isotopes $Pb^{210}$
RaE Bismuth isotopes $Bi^{210}$
Radium isotopes $Ra^{223}$
decay, 6: 3345

**Radium isotopes $Ra^{224}$**
conversion electron spectrum 6: 4275(J)
cutaneous absorption, when applied in ointment and in lacquer vehicles, 6: 4711
effect on hyaluronic acid-hyaluronidase system, 6: 3494(J)
excited states, 6: 5700(J)
excited states, spins, 6: 5194(J)
therapy of Bechterew's disease with peteosthor, 6: 6519(J)
therapy of bone and joint tuberculosis with peteosthor, 6: 6520(J)
therapy of bone tuberculosis with, and radiation damage by, 6: 3908(J)
tissue distribution and excretion of, and decay products, 6: 6513(J)
tissue distribution as peteosthor, radioautography, 6: 3508(J)
**Radium isotopes $Ra^{226}$**
alpha spectra, 6: 3108
excited states, spins, 6: 5194(J)
**Radium isotopes $Ra^{228}$**
analysis of solutions of, for toxicity studies, 6: 4691(R)
excited states, 6: 4991(J)
neutron cross sections $(n,\gamma)$, 6: 2788(J)
**Radium isotopes $Ra^{229}$**
formation by $Ra^{228}$ $(n,\gamma)$, 6: 2788(J)
**Radium isotopes $Ra^{230}$**
formation and decay schemes, 6: 284
**Radium sulfates**
metabolism, 6: 4690(R)
**Radon**
biological effects of, as compared to x radiation, 6: 763
detection and measurement in air, 6: 5417(R)
dosage determinations of, and tissue distribution of decay products from, 6: 1607(J)
exhalation from the earth, determination of rate of, 6: 6482(J)
gamma spectra, 6: 446(R)
measurement in breath, 6: 1802(R)
origin and content in expired air of normal men, 6: 5035(J)
permissible limits, 6: 3182(R)
retention in lungs, 6: 4348(J)
**Radon isotopes**
decay schemes of $Rn^{209}$, $Rn^{210}$, and $Rn^{211}$, 6: 4525
half lives, $\alpha$ energies, and branching ratio of $Rn^{209}$, $Rn^{210}$, $Rn^{211}$, and $Rn^{212}$, 6: 3345
sample preparation for decay studies, 6: 4525
**Radon isotopes $Rn^{220}$**
binding energy of, calculation, 6: 333(J)
diffusion and recoil in films of barium stearate by emanating-power measurements, 6: 5402(J)
**Radon isotopes $Rn^{221}$**
decay, 6: 3345
**Radon isotopes $Rn^{222}$**
half lives of, measured by differential ionization method, 6: 1357(J)
**Rainwater**
radioactivity in, following atomic bomb explosions, 6: 3443(J)
**Rare earth carbides**
attack by water vapor and organic vapors, 6: 6011(J)
**Rare earth chlorides**
activity coefficients in aqueous solutions, 6: 558
conductances, transference numbers, and activity coefficients, 6: 3538(J)
crystal structure, 6: 5745
transference numbers, 6: 563
**Rare earth complexes**
with (ethylenediamine)tetraacetic acid, spectrophotometry of, 6: 2889(J)
with (ethylenediamine)tetraacetic acid, stability constants and free energies of formation, 6: 4438(J)
**Rare earth compounds**
crystal structure, 6: 5322(R)
**Rare earth crystals**
potential functions of, matrix element calculations, 6: 3252(J)
**Rare earth fluorides**
precipitation of anhydrous crystalline, 6: 2337(J)
**Rare earth halides**
conductances, transference numbers, and activity coefficients of aqueous solutions, 6: 4010
**Rare earth isotopes**
alpha emission from, 6: 1556
spins of, theory, 6: 4205(J)
**Rare earth minerals**
radiometric determination, 6: 3285(J)
**Rare earth oxychlorides**
thermodynamic properties and crystal energy, 6: 1753
**Rare earth vanadates**
crystal structure, 6: 1409(J)
**Rare earths**
(See also Actinides.)
**Rare earths (cont'd)**
alpha emission from, 6: 412
bibliographies, 6: 4009
crystal structure and latent heat of vaporization, 6: 4804(R)
determination by pile activation, 6: 549(J)
effects on creep properties of Mg-Zr alloys, 6: 4079(J)
electrochromatographic separation, 6: 6570
electron configurations, 6: 5116
fractional-precipitation separation, 6: 1174(J), 4753, 6334(J)
gravimetric determination in Mg alloys, 6: 6543(J)
ion-exchange separation, 6: 3256(J)
ion-exchange separation equipment, 6: 3545(J)
ion-exchange separation theory, 6: 561, 1690(J)
ionization potential in alkaline earth phosphors, 6: 2333(J)
metallurgical effects of addition to cast steels, 6: 6367(J)
preparation and purification, 6: 1464
preparation by Ca reduction of chlorides, 6: 1171
production of pure, by the Ames process, 6: 2336(J)
review, 6: 6332(J)
separation, 6: 842(J)
separation methods, review, 6: 5068(J)
separation of Th from, with ammonium furoate and Na sulfanilate, 6: 5995(J)
spectrochemical analysis of mixtures of, 6: 6309(J)
spectrographic analysis of mixtures of, 6: 2308
trivalent, fractionation of, 6: 2632
trivalent, solvent extraction with TBP, 6: 2632
**Rare gases**
(See also the specific elements in the group.)
ion drift velocities in, 6: 931(J)
ionization by $\gamma$ radiation, as filling for ionization chambers, 6: 5831(R)
molecular ion formation in, 6: 931(J)
molecular ions in, mass spectrographic studies of, 6: 947(J)
**Rate meters**
(Integration of the pulses takes place in the circuit; for instruments integrating the pulses in the detector component see Radiation detection instruments (ion current type).)
design, 6: 1(R), 1802(R), 3477(P)
instruction manual for type 1011 (British), 6: 2139
mark V model I Beta-Contamination Monitor, NRDL, design, 6: 5431
operating and technical manual for, type AEP 1902 (Canada), 6: 2971
wide-range logarithmic, design, 6: 4881(J)
**Rats**
depilation with Sr sulfides, and effects of lanolin on depilated skin, 6: 4345
effects of radiation on maternal behavior and maze performance of, 6: 5551
effects of single and periodic doses of x radiation on growth of, 6: 6343
median lethal doses of radiation for, determination, 6: 6267(J)
quarters for, criteria for air conditioning, 6: 1373
urinary excretion of, effect of saline and pituitary hormone on, 6: 1622(J), 1623(J)
weight changes and water consumption of, effects of whole-body x irradiation on, 6: 5010
**RCA Labs. Div., Radio Corp. of America**
progress reports, 6: 935(R), 2694(R), 4558(R)
**RCA-Victor Div., Radio Corp. of America**
progress reports, 6: 3339(R), 3354(R)
progress reports on ionization chambers, 6: 638(R), 648(R), 649(R), 650(R), 651(R), 652(R), 5831(R)
**Reaction mechanisms**
effects of isotopic substitution on, 6: 4390
mathematical analysis, 6: 2311
of oxidation-reduction reactions in solution, 6: 6529
spectrophotometric determination of rate constants, 6: 79
temperature variation of equilibrium constants, nomographs, 6: 354
tracer studies, bibliography, 6: 5763(J)
**Reaction mechanisms (chemical)**
(See as subheading; see Photosynthesis; Reaction mechanisms (inorganic); Reaction mechanisms (organic); Solid state reactions; Szilard-Chalmers reaction.)
**Reaction mechanisms (inorganic)**
measurement, design of megacycle oscillator for, 6: 4120
rate processes in inorganic solids, measured by self-diffusion, 6: 6301(R)
theory based on cation screening, 6: 5984
**Reaction mechanisms (organic)**
(Including kinetics, rate studies, rearrangements, etc.; see also Hydrogenation; Oxidation; Organic syntheses; etc.; and specific compounds.)
application of radioactive tracers to, 6: 3770(J)
ascorbic acid oxidation in presence of thyroxine and derivatives, 6: 80

Reaction mechanisms (organic) (cont'd)
of Victor Meyer and Hartmann reaction, 6: 2642
Reactor control systems
electromagnetic rod-position indicator, design and performance, 6: 6104
for low cost reactor, design, 6: 5871
servomechanisms for, limitations, 6: 4218
Reactor coolants
(See also as subheading under specific reactors; see also materials used as coolants.)
liquid Ga as primary, 6: 2079
properties of, review, 6: 2481(J)
Reactor cooling systems
(See also the subheading cooling system under specific reactors.)
mathematical analysis of flow of gases in constant-area passages with friction and arbitrary heat addition, 6: 4046
Reactor design
(See the subheading design under specific reactors.)
Reactor engineering
laboratory manual used for reactor physics course at Oak Ridge School of Reactor Tech., 6: 6145
Reactor experimental facilities
high-temperature furnace for use in nuclear reactors, design, 6: 1316
Reactor fuel elements
(See also the subheading fuel elements under specific reactors.)
in low cost reactor, design and corrosion by water, 6: 5871
sampling plan for determining average quality, 6: 5197(J)
Reactor fuel rods
corrosion in Norwegian heavy-water reactor, 6: 5101(J)
Reactor materials
(See subheadings design; materials; shielding; etc., under specific reactors; also specific materials of use in reactors, e.g., Graphite; Beryllium; and the general headings Reactor shielding, etc.)
properties of, review, 6: 1315, 2481(J)
radioactivity induced in, by a neutron flux, 6: 1908
selection of, lecture on factors in, 6: 1189
Reactor moderators
(See also subheading moderators under specific reactors; see also Graphite moderated reactors; Heavy water reactors; Reactor materials.)
materials for, review of properties of, 6: 1315
Reactor oscillators
neutron absorption measurement by, 6: 4916(J), 4917(J)
Reactor reflectors
(See also the subheading reflectors under specific reactors.)
design, for low cost reactor, 6: 5871
effect on transient behavior of reactor, 6: 4939(J)
Reactor safety
(See also subheading safety under specific reactors.; see also Criticality studies; Reactors — criticality studies.)
hazards and safety characteristics of reactors, 6: 1322
Reactor shield ducts
neutron leakage, 6: 4616
neutron leakage, diffusion solution for, 6: 4915
Reactor shielding
(See also the subheading shielding under specific reactors; see also Shielding.)
design of, lecture on, 6: 1360
elastomeric materials for, 6: 443
elastomers and plastics as, 6: 3126(R)
Reactor simulators
(See also characteristic or component simulated under specific reactors and Reactors; see also Computers.)
design, 6: 3469(P)
design of, to assist in design of control system for NRU reactor, 6: 1802(R)
Reactor solutions
(See also specific reactors using solutions; see also materials dissolved.)
handling system for Los Alamos water boiler, 6: 5469
physical properties, 6: 3070(R)
Reactor tubes
(See also tubes as subheading under specific reactors.)
size of, for a specified heat transfer and flow friction performance, 6: 1709
Reactors
(See also specific reactors.)
AEC program for, lecture on, 6: 1318
book: The Elements of Nuclear Reactor Theory, 6: 5873(J)
chart summarizing unclassified features of, 6: 5196(J)
chemical and engineering problems in the development of, lecture on, 6: 1320
construction of first, at Univ. of Chicago, 6: 353
Reactors (cont'd)
criticality studies for, 6: 354
effect of reflector on transient behavior, 6: 4939(J)
fuel recovery, 6: 3540
group theory, 6: 952, 1000, 1319
group theory on bulk conservation of neutrons, 6: 3404
hazards of low power research, lecture on, 6: 1322
heat transfer in, lecture on, 6: 1201
heat transfer problems affecting design of, 6: 5359
instrumentation and control for, lecture on, 6: 1321
kinetics, dependence on temperature, 6: 5872
kinetics of subcritical with nonperiodical time-dependent neutron sources, 6: 4940(J)
limiting extrapolation length for infinite slab with reflector from two-group theory, 6: 6452
loading of, at ORNL, 6: 2482(J)
low cost, design and instrumentation, 6: 5871
monitoring with spark counter, 6: 5450(J)
multi-group calculations for, test of, 6: 695
multi-group equations for, numerical integration of, 6: 694
neutron-density measurements in, with NaI(Tl) crystals, 6: 4880(J)
neutron flux distribution, influence of cylindrical channel on, 6: 332
neutron flux measurements in, design of bolometer for, 6: 2713
neutron flux measurements in, ionization chambers for, 6: 666(J)
reactivity of, measurement, 6: 1527
survey of types, 6: 1323
theory, 6: 3071
theory, lectures on, 6: 1319, 3682
two-group calculations, lumped reflector parameters for, 6: 6685
Recoil ions
energy loss in tissue, 6: 34
Rectifiers
(Crystal, copper oxide, mechanical; see also Electron tubes; Power supplies.)
design, 6: 488(P)
Red Desert Region
airborne radioactivity survey of, 6: 589
Reducing agents
effects of x radiation on dilute aqueous solutions of, 6: 2329
Reduction
(See also as subheading under materials reduced.)
kinetics in solution, 6: 6529
radioinduced, effects of oxygen on, 6: 5343(J)
Refractive index
(See subheading optical properties under specific materials.)
Refractometric analysis
immersion liquids for, 6: 2873
Refractory materials
(See also specific materials.)
chemical and physical properties, tables, 6: 5369
corrosion by liquid Bi, 6: 900
corrosion by liquid Sn and Bi, 6: 6351
effects of porosity on thermal conductivity, 6: 5098(R)
for high-temperature use in aircraft, 6: 200
preparation, crystal structure, and melting points of, 6: 3566(J)
spectrographic analysis of, carbon effect in, 6: 160(J)
thermal conductivity, measurement by ellipsoid envelope method, 6: 2918
thermal conductivity at high temperatures, 6: 578
x-ray-diffraction analysis of, use of x-ray spectrogoniometer in, 6: 4560
Remote-control equipment
(See also Servomechanisms.)
conveyor for BEPO radiation cans, 6: 5134
for handling radioactive materials, 6: 6510
manipulator for grasping tools, 6: 4316(P)
pipetting arrangement, design, 6: 5064(J)
snare-type handling device, design, 6: 3337
viewing box for radioactive materials, 6: 4314(P)
wrench and saw-vise combination for disassembling contaminated cells, 6: 5063(J)
Rensselaer Polytechnic Inst.
progress reports, 6: 2340(J)
Reproduction
effects of radiation on, in rabbits, 6: 504(R)
Reptiles
effects of x radiation on hematopoietic system, life span, and reproductive system of, 6: 1090(J)
Research Foundation, Ohio State Univ.
progress reports on cryogenics, 6: 3299(R)
Research Lab. of Electronics, Mass. Inst. of Tech.
progress reports, 6: 1750(R), 4085(R)

Research reactors
(See North Carolina research reactor.)
Resins
(See also Plastics.)
chloride capacity, determination of, 6: 5368(R)
evaluation of, for decontamination of $H_2O$, 6: 830(R)
Resistance furnaces
design, 6: 236(R)
hydraulically operated with controlled atmosphere, design, 6: 6324
for study of in-pile gas-solid reactions, 6: 135
Resistance thermometers
design and performance, 6: 1780
of germanium-indium alloy, for use at liquid He temperatures, 6: 5620(J)
Resistors
precision megohm ratio unit for high-voltage measurements, 6: 5817(J)
thermoelectrically balanced meter network, design, 6: 3471(P)
Resonators
electromagnetic, design and use for testing dielectric properties of titania ceramic, 6: 1493
Respiration
effects of 2,4-dinitrophenol on, in tissue, 6: 2285
effects of radiation on, in eggs and sperm of sea urchin, 6: 3486
effects of x radiation on, in bacteria, 6: 1079
metabolic rate and radioactivity of expired $CO_2$ of cows, apparatus for measuring, 6: 2850(J)
Respiratory tracts
physiology of, as affected by radiation, 6: 3158
retention and toxicology of $BeSO_4$ in, 6: 4696(R)
Reticulo-endothelial system
effects of radiation on, 6: 33
reaction to K, tonicity and albumin, 6: 6238
role in lung clearance of insoluble foreign particles, effects of radiation on, 6: 5552
Rhenium
neutron low-energy resonances in, 6: 5427
neutron resonance cross sections, 6: 1304(R)
superconductivity, 6: 5614
Rhenium isotopes $Re^{186}$
separation by Szilard-Chalmers reaction, 6: 2041(J)
Rhenium isotopes $Re^{187}$
isomeric $\gamma$ transition in, multipole order of, 6: 3688
Rhenium isotopes $Re^{188}$
decay schemes, 6: 5514(J)
separation by Szilard-Chalmers reaction, 6: 2041(J)
Rhenium oxychlorides
microwave spectra and molecular structure, 6: 2051(J)
Rhodium
adsorption of $H_2$ by dispersed, in aqueous KOH, $H_2SO_4$, and HBr, 6: 6337(J)
deuteron range-energy relation in, 6: 1032(J)
neutron low-energy resonances in, 6: 5427
tissue distribution in rats, 6: 496(R)
x-ray spectra, 6: 97(J)
Rhodium isotopes
in fission products, 9-hr activity, 6: 4724(R), 5298(R)
yield from U fission, 6: 1424(R)
Rhodium isotopes $Rh^{99}$
positron spectra, 6: 3115(J)
Rhodium isotopes $Rh^{101}$
positron spectra, 6: 3115(J)
Rhodium isotopes $Rh^{103}$
energy levels, from $Ru^{103}$ decay, 6: 4256(J)
neutron reactions, 6: 3045(J)
nuclear spin and magnetic moment, 6: 2175(J)
tritium reactions, 6: 3111(J)
Rhodium isotopes $Rh^{104}$
gamma spectra, 6: 1923(J)
isomeric transition, 6: 409
Rhodium isotopes $Rh^{105}$
beta spectra, 6: 3115(J)
gamma radiation accompanying decay of, 6: 4263(J)
radiation from, measurement of, 6: 2532(J)
radioactivity, 6: 3111(J)
Rhodium isotopes $Rh^{106}$
decay schemes, 6: 5229
gamma emission from, polarization and angular correlation of, 6: 430(J)
Rhodium–palladium alloys
adsorption of $H_2$ by dispersed, in aqueous KOH, $H_2SO_4$, and HBr, 6: 6337(J)
Ribonucleic acid, desoxy-
effects of bischloroethylmethylamine on mobility and viscosity, 6: 6326(J)
Ribonucleic acid, desoxy- (cont'd)
effects of radiation and radiomimetic substances on, 6: 2627(J)
effects of x radiation on viscosity of aqueous, 6: 4005(J)
separation from pneumococcus type VI, 6: 762
Ribonucleic acids
effects of compounds derived from, on physiological changes following total-body irradiation, 6: 2567
enzymatic degradation products of, 6: 1172
hydrolysis and enzymolysis products of, 6: 3745
separation from pneumococcus type VI, 6: 762
variation in liver cells following 1000-r x irradiation, 6: 6508(J)
Ribulose
in photosynthesis, 6: 2057(J)
Richards Mineral Engineering Lab., Mass. Inst. of Tech.
progress reports, 6: 4497(R), 5368(R)
Rickets
effects on deposition of Ga in rat bones, 6: 2838(R)
Robineau Claims (Colorado)
torbernite occurrence at, 6: 214
Rochester Univ.
progress reports, 6: 3386(R)
progress reports on spallation reactions, 6: 5875(R)
Rockets
propulsion of, application of nuclear power to, 6: 1066
Rocks
activation determination of U in, 6: 5737, 5741
age estimations, 6: 4062
age estimations, by thermoluminescence, 6: 6617
measurement of radioactive elements in, nuclear emulsion techniques for, 6: 4985(J)
radioactive decay rate and age estimations of, 6: 425(J)
radioactivity and K content of, in Vosges Mountains (France), 6: 3918(J)
radioautographic analysis with gel-type emulsions, 6: 3005(J)
ratio of $C^{12}$ to $C^{13}$ in magmatic, 6: 6400(J)
ratio of O isotopes in, 6: 1744(J)
Roots
effects of dissolved O in water surrounding, on radiosensitivity of, 6: 1955(J)
effects of $P^{32}$ radiation on cell division in meristem of wheat, 6: 6252(J)
effects of radiation on broad bean, 6: 3160(J)
effects of radiation on growth of, 6: 39(J)
radiosensitivity of, effects of temperature on, 6: 44(J)
Round Hill Field Station, Mass. Inst. of Tech.
progress report on meteorology research, 6: 6673(R)
Rubber
(Specific elastomers, e.g., hevea, are indexed as organic compounds; see also Plastics.)
corrosion by $H_2O_2$, 6: 240(J)
thermo-osmosis of gases through, 6: 1776(J)
Rubidium
abundance in igneous rocks and meteorites relative to K, 6: 5373(J)
average charge on atoms of, after Kr $\beta$ decay, 6: 5696
chromatographic separation from K and Cs, 6: 848(J)
natural radioactivity of, 6: 1559(J)
x-ray spectra, 6: 97(J)
Rubidium (liquid)
viscosity, 6: 2006(J)
Rubidium borates
coloration, 6: 142(J)
Rubidium chlorides
activity coefficients, 6: 2643(J)
molecular-beam magnetic-resonance spectra of, 6: 2734(J)
Rubidium fluorides
composition and structure of, containing excess F, 6: 2033(J)
molecular-beam magnetic-resonance spectra of, 6: 2734(J)
Rubidium iodides
luminescence, temperature effects on, 6: 6125(J)
Rubidium isotopes $Rb^{85}$
energy levels, from $Sr^{85}$ and $Sr^{85m}$ decay, 6: 2778
energy levels, from $Sr^{85}$ K-capture decay, 6: 2221(J)
hyperfine structure, 6: 2230(J)
internal conversion in, 6: 5456(R)
nuclear magnetic resonance absorption-line broadening in metal, 6: 6445(J)
nuclear resonance, 6: 2744
sign of quadrupole interaction energy of, in $Rb_2$, 6: 3836(J)
Rubidium isotopes $Rb^{86}$
beta spectra, maximum energy, 6: 5706(J)
decay of, $\beta$-$\gamma$ angular correlations in, 6: 1843(J)
half life of isomeric state of, 6: 2218(J)
nuclear properties, 6: 1928
nuclear spin, 6: 1909

Rubidium isotopes $Rb^{87}$
beta spectrum, third-forbidden correction function and ft value, 6: 4662(J)
beta spectrum and half life, 6: 6714(J)
gamma cross sections $(\gamma,\alpha)$, 6: 1012(J)
gamma reactions $(\gamma,\alpha)$, 6: 1871(J)
half life, 6: 1355(J)
half life and decay scheme, 6: 4253(J), 5918(J)
hyperfine structure, 6: 2230(J), 4085(R)
interaction constants in RbCl and RbF, 6: 2734(J)
nuclear magnetic resonance absorption-line broadening in metal, 6: 6445(J)
sign of quadrupole interaction energy of, in $Rb_2$, 6: 3836(J)
Rubidium isotopes $Rb^{88}$
decay scheme, 6: 1926(J)
positively charged, from $\beta$ decay of $Kr^{88}$, 6: 3761
Ruthenium
neutron resonances in, 6: 2468(R)
oxidation-reduction states, 6: 1653
reactions with 4-phenylthiosemicarbazide and diphenylthiocarbazide, 6: 2595
x-ray spectra, 6: 97(J)
Ruthenium complexes
with semicarbazides, formation, 6: 3517
spectrophotometric analysis, 6: 539, 1653
with sulfate in $H_2SO_4$, 6: 6303(J)
with thiourea, formation and properties of, 6: 1119
Ruthenium isotopes $Ru^{94}$
formation by $Mo^{92}$ $(\gamma,2n)$ and $Mo^{94}$ $(\alpha,4n)$, 6: 5235(J)
half life, 6: 5235(J)
Ruthenium isotopes $Ru^{103}$
decay schemes, 6: 4256(J)
gamma emission, 6: 4266(J)
Ruthenium isotopes $Ru^{105}$
beta spectra, 6: 3115(J)
preparation of carrier-free, 6: 1422
Ruthenium sulfates
chemical properties of sexavalent, 6: 6303(J)
Rutile
thermal capacity of $CH_4$ adsorbed on, 6: 868
Rutin
adrenal-stimulating effect of, 6: 15(J)
therapeutic uses in radiation injuries, 6: 4699(R)


## S


S particles
(See also Mesons($\kappa$); V particles.)
mass and decay, 6: 5851(J), 6620(R)
multiplate-cloud-chamber study of, 6: 5404(R)
Safety
(General handbooks, rules, and regulations; see also as subheading under specific devices and radiations.)
handbooks used at AERE, 6: 514
procedures for cyclotron operation, 6: 5484(J)
Saint Louis Univ.
progress reports, 6: 954(R)
St. Olaf Coll.
progress reports, 6: 5043(R)
Salamanders
regeneration of denervated limbs of, effect of x rays on, 6: 3496(J)
regeneration of x-irradiated limbs of, effect of tissue transplant on, 6: 5943(J)
Salicylamide
bromination with oxidative ring closure, 6: 6015
Salicylic acid, sulfo-
therapeutic uses in Be poisoning, 6: 4693(R)
Salt Wash Member
exploration, 6: 5597
Salts
solvent extraction, factors influencing, 6: 6333
Samarium
fluorescence spectra in borax beads, 6: 6571(J)
fluorimetric determination, 6: 2585(R), 4724(R), 5311(R)
ionization potential in alkaline earth phosphors, 6: 2333(J)
neutron absorption by, reactor oscillator studies, 6: 4917(J)
neutron emission of, search for, 6: 2219(J), 4277(J)
neutron total cross sections as function of energy, 6: 5499(J)
paramagnetism, theory, 6: 4205(J)
Samarium chelates
infrared and Raman spectra of, with 2,4-pentanedione, 6: 2882(J)
Samarium chlorides
activity coefficients in aqueous solutions, 6: 558
electric conductivity and activity coefficients in aqueous solution, 6: 2870(J)
Samarium chlorides (cont'd)
transference numbers, 6: 563
vapor phase hydrolysis, heat and free energy of reaction, 6: 6330
Samarium complexes
luminescence spectra of $\beta$-diketone and other, 6: 3539(J)
Samarium compounds
ferrates(III), with two ferromagnetic Curie points, 6: 5562(J)
Samarium fluorides
reflection spectra, 6: 2339(J)
Samarium(III) ions
absorption spectra and transition probabilities for, 6: 3418
Samarium isotopes
decay schemes, 6: 1907
Samarium isotopes $Sm^{145}$
decay schemes, 6: 3120(J)
Samarium isotopes $Sm^{147}$
nuclear spin, 6: 4204(J)
Samarium isotopes $Sm^{149}$
nuclear spin, 6: 4204(J)
Samarium isotopes $Sm^{151}$
beta spectra and photon emission, 6: 1906
decay schemes, 6: 5915(J)
half lives, 6: 4982
Samarium isotopes $Sm^{153}$
beta and $\gamma$ spectra, measurement of, 6: 3119(J)
decay schemes, 6: 5515(J)
Samarium isotopes $Sm^{155}$
decay schemes, 6: 3120(J)
Samarium oxides
reflection spectra, 6: 2339(J)
Samarium oxyfluorides
reflection spectra, 6: 2339(J)
Samarium silicides
preparation and crystal structure, 6: 2335(J)
Sampling
of liquid metals, equipment for, 6: 5376
of sewage, design of unit for continuous proportional, 6: 6511(R)
statistical method for determination of average quality of reactor fuels, 6: 5197(J)
of water droplets in natural clouds and in radiation fogs, 6: 4528(J)
Sand
relation of radioactivity to particle size in Eniwetok Atoll, 6: 5933(R)
Sarah Mellon Scaife Radiation Lab., Univ. of Pittsburgh
progress report on radiation scattering laboratory for cyclotron, 6: 6461(R)
Sarcomas
(See also specific sarcomas, organs, tissues, animals, etc.; see also Carcinomas.)
effects of a small intestinal microsomal fraction on growth of transplanted, 6: 5931
regression of, synergistic effects of simultaneous systemic and local x radiation on, 6: 1082
uptake of methionine $S^{35}$ by, effects of radiation on, 6: 4704(J)
uptake of $S^{35}$ in diagnosis and therapy of chondrosarcomas, 6: 5723(J)
Sarcosine
metabolism in the biosynthesis of formates, 6: 2837
Scalers
with cold-cathode thyratrons, design, 6: 1779
counting losses in, calculation of, 6: 314(J)
coupling of scale-of-two circuits, 6: 4857(J)
design, 6: 3336(R)
four-tube decade design, 6: 1815(J)
with gated decade circuit, 6: 6649
handbook on, 6: 2976
high speed, design, 6: 2975
high-speed scale-of-three, design, 6: 6398(J)
instruction manual for type 200 and 200A (British), 6: 2137
instruction manual for type 1009A (British), 6: 2138
magnetic, design, 6: 2127
manuals for high speed, type AEP 908-1, Canadian, 6: 2975
for testing scintillation counters, 6: 5440(J)
type 1070A (British), design and operation of, 6: 1505
Scandium
atomic weight, 6: 3972(J)
chemical determination of small concentrations of, 6: 824(J)
solvent extraction with TBP, 6: 2632
tissue distribution in rats, 6: 3156(R)
volatilization rate in He d-c arc spectroscopy, 6: 2607(J)
Scandium chelates
infrared and Raman spectra of, with 2,4-pentanedione, 6: 2882(J)
Scandium isotopes
decay schemes, 6: 1907

Scandium isotopes $Sc^{45}$
mass, 6: 991(J)
nuclear magnetic moments, 6: 1849(J)
Scandium isotopes $Sc^{46}$
gamma-gamma angular correlation in, 6: 1913(J)
isomeric transition in, 6: 1046
Scandium isotopes $Sc^{48}$
decay schemes, 6: 4250
gamma emission, 6: 4252
Scandium silicides
preparation and crystal structure, 6: 2335(J)
Scars
from burns or other injuries incident to atom bomb explosion, a survey of healing after four years, 6: 6257(J)
Scattering
(See as subheading under specific particles and radiations.)
Schroeckingerite
occurrence in Utah, 6: 5778
Scintillation
(See as subheading under specific materials.)
Scintillation counters
(See Radiation detection instruments (pulse type); Scintillation detectors.)
Scintillation detectors
(See also Crystal detectors; Phosphors.)
air equivalence of, 6: 2438(J)
for air monitoring, 6: 1278(R)
for alpha dosimetry in single biological cells, 6: 293
for alpha particles, design, 6: 4872(J)
anthracene, for neutron flux and spectrum measurements, 6: 4589(J)
circuit and pulse analyzer for, 6: 6412
circuit for use with, for speeding and improving contrast of thyroid scintigrams, 6: 3628
collimators for use with, in detecting tumors, 6: 5157(J)
Compton scattering in, variation of cross section with $\gamma$ energy, 6: 5894
counting, integrated-intensity, and storage methods used with, 6: 5840(J)
decay time, pulse heights, and fluorescence spectra of organic, 6: 1424(R)
design, 6: 59(R), 640(R), 1506(R), 3336(R), 4870(R)
detection of cosmic showers with, 6: 5126(J)
with 2,5-diphenyloxazole in toluene, performance, 6: 4576
effective resolution of, method for increasing, 6: 1801
effects of $\alpha$ and $\gamma$ rays on conductivity and fluorescence of, 6: 1392(R)
effects of fatigue in photomultipliers on results of, 6: 665(J)
efficiency in counting fast neutrons and $\gamma$ radiation, 6: 4577
efficiency of anthracene phosphor, for high-energy $\gamma$ rays, 6: 2720(J)
exciton theory of, and analogy with nuclear emulsions, 6: 4585(J)
for fast neutrons, design, 6: 641
gamma spectrometers made from, 6: 4148(J)
for high energy particles, 6: 3000
Hornyak, for detection of fission neutrons from $U^{235}$, 6: 6120
with interchangeable phosphors, design, 6: 2432
in investigating double stars produced by cosmic radiation, 6: 4094(J)
large, for study of cosmic showers, 6: 6620(R)
liquid, design, 6: 2995, 3106
liquid, design of large-area, 6: 5439(J)
liquid, detection of thermal neutrons by B dissolved in, 6: 1286
liquid, for determination of specific activities of $C^{14}$-labeled organic compounds, 6: 3640(J)
liquid, homogeneous counting of biological material with, 6: 294
liquid, for low-activity $\beta$-active solids, 6: 5845(J)
liquid, mode of action and efficiency of, 6: 294
liquid, theory, 6: 2995
for liquid or solid samples, 6: 521
lithium iodide crystals as, 6: 1507
for measuring activity of biological samples, 6: 1813(J)
monitor and x-ray yield integrator for betatron, 6: 1799
for monitoring $\gamma$ source, 6: 5834
neutron counting efficiency of, 6: 2133
for neutron detection, design, 6: 5428
neutron response of NaI(Tl), 6: 4590(J)
noise discrimination gating system for, 6: 5841(J)
nuclear events in, localization of, 6: 2707
operation, 6: 446(R)
optics of polished phosphors and resolution, 6: 5833(R)
organic, response to d-d neutrons, 6: 3664(J)
organic crystal, fluorescence of, 6: 306(J)
performance, 6: 961, 1802(R)
performance, as affected by afterpulses in photomultiplier tubes, 6: 2436
photomultiplier coincidence circuit for use with, 6: 4318(P)
photomultiplier tubes 4646 and H-5037 for, 6: 5844(J)
plastic, internal absorption of fluorescent light in, 6: 5647(J)
preparation and operation, 6: 6414
for protons, using NaI, 6: 2710
pulse-equalizing circuit for use with, 6: 1798
Scintillation detectors (cont'd)
pulse height vs. energy curve for NaI(Tl), 6: 2145
pulse lifetimes, 6: 6409
pulse-size distribution in $\alpha$ detection, 6: 4588(J)
resolution in, improvement of, 6: 3335
resolving power of NaI, for $\gamma$ rays, 6: 6415(R)
resolving time of, as limited by statistical fluctuations associated with the emission and collection of photons, 6: 2428
response, 6: 3387(R)
response dependence on x-ray wave length, 6: 3637(J)
response of lithium iodide neutron detector, 6: 3817
response of organic-crystal, to low-energy $\alpha$ particles, 6: 4152(J)
response to charged particles, 6: 966(J)
response to low-energy particles, exciton theory, 6: 4151(J)
satellite pulses from photomultipliers used with, 6: 2143(J)
self-delayed coincidence circuit for, design, 6: 2433
silver-activated ZnS and $B^{10}$ enriched $B_2O_3$ mixture, for neutron detection, 6: 6119
stabilization circuit for photomultiplier used with, 6: 5137(J)
stilbene in various forms as, 6: 2444(J)
with sulfur crystals, effect of air ionization between electrodes, 6: 4891(J)
symposium on, digests of papers, 6: 5163(J)
techniques for electron and $\gamma$-ray spectroscopy with, 6: 307(J)
testing of crystals for, 6: 646
thallium-activated $CaI_2$ and CsI as, 6: 1806(J)
theory, design, and performance of, bibliography on, 6: 2141
for tissue depth-dose measurement of x radiation, 6: 5429
velocity selector for, 6: 4143
Scintillators
(See Phosphors.)
Sclerosis
(See Atherosclerosis.)
glomerulo, in diabetic patients, 6: 1074
Screens
pore-size determination by particle-size distribution, 6: 5368(R)
Sea water
analysis for As by radioactivation, 6: 3755
Seals and glands
(See also Gaskets; Vacuum seals.)
back diffusion of gases in, 6: 2123
design and testing of gas seals for KAPL intermediate power breeder control rods, 6: 1707
Second sound
(See Helium (liquid)—second sound.)
Sedimentation
from concentrated suspensions in relation to particle size, 6: 3582
radioactivity in relation to rhythm of, 6: 5600(J)
Sedoheptulose
in photosynthesis, 6: 2057
Seed
(See also specific plants.)
effects of electron irradiation on sterilization and germination of cotton, 6: 2815(J)
effects of fast neutrons on germination and seedling growth of pine, 6: 6253(J)
effects of radiation on, 6: 32
effects of x rays and neutrons on, 6: 41(J)
effects of x rays and thermal neutrons on dormant barley, comparison, 6: 5262
spontaneous and radioinduced mutants from barley and wheat, analysis of, 6: 2262(J)
Selenium
electrical conductivity of liquid, 6: 4077(J)
proton and deuteron reactions in, radioactivity of Br isotopes from, 6: 3871(J)
thermal capacity, 6: 5389(R)
Selenium isotopes
decay schemes, 6: 1907
Selenium isotopes $Se^{73}$
decay schemes, 6: 1050(J)
Selenium isotopes $Se^{74}$
mass, 6: 3054
Selenium isotopes $Se^{77}$
isomeric transition, 6: 409
metastable state of, 6: 1909
nuclear magnetic moment, from nuclear-induction measurements, 6: 3843(J)
Selenium isotopes $Se^{79}$
spin and quadrupole moment, 6: 2746(J), 3395
Selenium isotopes $Se^{81}$
yields of isomers of, from (d,p) reactions, 6: 1424(R)
Selenium isotopes $Se^{82}$
deuteron cross sections (d,2n), 6: 1015(J)

Selenium–tellurium alloys
electrical conductivity of liquid, 6: 4077(J)
Selenium–thorium alloys
metallography of, with polarized light, 6: 1228
phase studies and crystal structure, 6: 5574(J)
Self diffusion
measurement of coefficients by tracer techniques, 6: 6301(R)
in metals, entropies of activation, 6: 6362
Semi-conductors
(See also specific materials.)
deuteron range-energy relation in, 6: 1032(J)
effects of radiation on, 6: 6705(R)
effects of radiation on, bibliographies, 6: 5694
electrical fluctuations in, theory of, 6: 1788(J)
localized electronic states in bombarded, 6: 557(J)
secondary photoconductivity in, 6: 1045(J)
Semicarbazide, 4-phenylthio-
reactions with Ru, 6: 2595
Separation processes
(See also subheadings for process steps under materials; see also specific processes.)
for recovery of reactor fuels, 6: 3540
Serine
metabolism in biosynthesis of formates, 6: 2837
Servomechanisms
(See also Remote-control equipment.)
bibliography on, 6: 2693
electromagnetic reactor control rod position indicator, 6: 6104
for harmonic analysis of spectra from scintillation spectrometer, 6: 5833(R)
limitations of, for reactor control systems, 6: 4218
proportional position controller, 6: 485(P)
Servomechanisms Lab., Mass. Inst. of Tech.
progress reports, 6: 296(R), 407(R)
Sewage
(See also Waste disposal.)
biochemical oxidation of, effect of radioactivity on, 6: 1597
continuous proportional sampling, design of a unit for, 6: 6511(R)
decontamination, 6: 1747
decontamination by filtration, layout of BNL disposal plant, 6: 5094
polarographic analysis for biochemical oxygen demand, 6: 6542
Sewage systems
concentration of $I^{131}$ and $P^{32}$ in, 6: 519(J)
contamination by $I^{131}$, 6: 883
contamination by $P^{32}$, 6: 789(R)
decontamination of $P^{32}$ and $I^{131}$ in, 6: 4056(R)
efficiency of BNL filter beds for removing low-level sewage, 6: 5094
Shale deposits (Montana)
reconnaissance for uraniferous, 6: 6599
Shale deposits (Tennessee)
mineralogy, 6: 3781(R)
Shales
fluorimetric analysis for U, 6: 1136
Shaped charges
jet formation in, limiting conditions for, 6: 4521
Sheel Clift Mine (North Carolina)
pegmatite minerals of rare-earth type in, 6: 4496
Sheep
metabolism of P in, tracer study with $P^{32}$, 6: 4384
Sheets
(See also Plates.)
tube, stresses in perforated, 6: 5088(J)
Shielding
(See also as subheading under devices shielded; see also main headings by name of radiation shielded, e.g., X-ray shielding; see also Reactor shielding.)
of abdomen, thorax, and head, effect on mortality of x-irradiated rats, 6: 2557(R)
in micropipetting radioactive solution, 6: 3446(J)
theory of, using transformation from disk to point radiation sources, 6: 2793
transport equation for semiempirical treatment of, 6: 3725
Shielding materials
(See also specific materials.)
elastomers and plastics as, 6: 3126(R)
properties of, survey, 6: 3445
secondary gamma production in, 6: 1342
selection of, lecture on, 6: 1380
Shinarump formation
occurrence of U in, 6: 891(R)
Shinarump formation (Ariz.), 6: 5776
Shock (biology)
release of heparin in, effects of radiation on, 6: 5718(J)
Shock (biology) (cont'd)
vasotropic substance involved in irreversible phase of, appearance in animal blood following whole-body irradiation, 6: 6255(J)
Shock waves
effects on mechanically constrained mice, 6: 12
luminosity produced by collisions of, in air and argon, 6: 4957(J)
propagation in shock tubes, 6: 3300
Showers
(See Cascade showers; Cosmic showers.)
Sickle cells
(See Erythrocytes.)
Sigma piles
calibration of neutron flux distribution for, 6: 4219
design, 6: 3384
Silane, triphenyl-
hydrogen isotope effect in hydrolysis of, 6: 6527
Silanes
halogen-substituted, microwave rotational spectra, 6: 3380(R)
mass-spectrometric ionization, dissociation, and critical potential, 6: 5145(J)
Silanes, fluororganic
preparation, 6: 130(J)
Silica
(See also Quartz; Silicon oxides.)
decoloration kinetics of pile-irradiated, 6: 4980(J)
Silica (colloidal)
vibration potentials, measurement of, 6: 3798
Silicates
artificial crystallization, 6: 1429
polarographic analysis for Li, 6: 820(J)
synthesis of, substituting $F^-$ for $(OH)^-$, 6: 1429
Silicic acids
polymerization, catalytic effect of fluorine ions on, 6: 4427(J)
Silicon
abundance of $Si^{32}$ in, 6: 5819
atomic weight, 6: 3972(J)
deuteron range-energy relation in, 6: 1032(J)
effects of radiation on, 6: 6705(R)
gravimetric determination in Co-U alloys, 6: 2309
infrared spectra of, calculations, 6: 161(J)
localized electronic states in bombarded, 6: 557(J)
neutron capture cross section, 6: 3834
oxidation at high temperatures, 6: 2377
proton elastic scattering cross sections, 6: 3422(J)
surface tension and wettability data for, on ceramic oxides, 6: 2924
Silicon–aluminum systems
corrosion, marine, 6: 5100(J)
grain refinement of, effect of various additions on, 6: 250(J)
titanium coated with, oxidation resistance of, 6: 5608(R)
Silicon–aluminum–magnesium systems
grain refinement of, effect of various additions on, 6: 250(J)
Silicon carbides
bibliography, 6: 4774
properties and production, review, 6: 4774
Silicon chlorides
reactivity of $Br^{80}$ with, effect of isomeric transition on, 6: 5752(J)
Silicon coatings
for titanium, evaluation of, 6: 2662(R)
on titanium, oxidation resistance of, 6: 5608(R)
Silicon–copper single crystals
plastic deformation, 6: 1470(R), 4795(R), 5386(R)
Silicon–iron alloy bi-crystals
grain-boundary diffusion, 6: 5108(R)
Silicon–iron systems
crystal structure, 6: 1155
grain boundary diffusion, 6: 6610(R)
Silicon–iron–magnesium systems
corrosion of, effects of impurities on, 6: 3573(R)
Silicon isotopes
deuteron reactions (d,n), 6: 3387(R)
mass defect of, 6: 1553
Silicon isotopes $Si^{27}$
beta spectra and half lives of, 6: 735
Silicon isotopes $Si^{28}$
deuteron reactions (d,n), 6: 2187(J)
deuteron reactions (d,p), Q values, 6: 5200(J)
energy levels, excited by alphas on $Mg^{24}$, 6: 3686
mass difference $P^{31}$-$Si^{28}$, 6: 4259(J)
packing-fraction differences involving, mass-spectrographic measurement of, 6: 2991
Silicon isotopes $Si^{29}$
deuteron reactions (d,α), Q values, 6: 5200(J)
deuteron reactions (d,α) and d,p), energy of, 6: 2185(J)

Silicon isotopes $Si^{29}$ (cont'd)
deuteron reactions (d,n), 6: 2187(J)
energy levels, from $Si^{28}$ (d,p), 6: 5200(J)
gamma reactions (γ,p), 6: 1874(J)
nuclear magnetic moments, 6: 994(J)
packing-fraction differences involving, mass-spectrographic measurement of, 6: 2991
Silicon isotopes $Si^{30}$
deuteron reactions (d,n), 6: 2187(J)
deuteron reactions (d,p), energy of, 6: 2185(J)
deuteron reactions (d,p), Q values, 6: 5200(J)
energy levels, from $Si^{29}$ (d,p), 6: 5200(J)
gamma emission of, from Al (α,p), 6: 1878(J)
gamma reactions (γ,p), 6: 1874(J)
packing-fraction differences involving, mass-spectrographic measurement of, 6: 2991
Silicon isotopes $Si^{31}$
beta spectra, 6: 1553
beta spectrum, and $P^{31}$-$Si^{31}$ mass difference, 6: 4259(J)
disintegration energy, 6: 2185(J)
energy levels, from $Si^{30}$(d,p), 6: 5200(J)
Silicon isotopes $Si^{32}$
abundance in natural Si, 6: 5819
Silicon–nickel systems
titanium coated with, oxidation resistance of, 6: 5608(R)
Silicon oxide films
preparation of, for windows for gaseous radiation targets, 6: 955, 2125
Silicon oxides
(See also Quartz; Silica.)
production by chloride decomposition, 6: 1944(P)
thermal and thermodynamic properties, 6: 4074
Silicon–zirconium systems
constitution diagrams, 6: 591(R), 4505(R)
Silicone coatings
preparation for high temperature use, 6: 885
synthesis of silicone polymers for use as, 6: 5586
Silicone polymers
synthesis for use as high temperature coatings, 6: 885, 5586
Silicones
corrosion by $H_2O_2$, 6: 240(J)
in preparation of samples for radiometric analysis, 6: 4890(J)
thermodynamic properties, 6: 127(J)
Silver
activation in determination of exposure of photographic film, 6: 5734
corrosion rate in ferric perchlorate, 6: 889, 1468
creep at 200°C, 6: 603(R)
determination of trace amounts by catalytic effect, 6: 2585, 5311(R)
deuteron range-energy relation in, 6: 1032(J)
dimensional changes normal to the direction of diffusion of, 6: 2106
electric conductivity of, effects of deuteron bombardment on, 6: 2214(R)
electric conductivity of, effects of elastic deformation on, 6: 241(J)
electron multiple scattering in, 6: 5502(J)
electron scattering by, 6: 1035(J)
electron single scattering by, 6: 5220(J)
electroplating of radioactive, for self-diffusion studies, 6: 2375
gamma absorption in L shell, 6: 6182(J)
gamma absorption by, ratio of K and L, 6: 2766(J)
gamma absorption coefficients, experimental and theoretical, 6: 5217(J)
heat of solution, 6: 4507(R)
high-energy neutron and proton reactions, 6: 2493(J)
hyperfine structure, 6: 1793
isotopic exchange of metal with Ag ions, 6: 3797(J)
neutron and proton charge-exchange reactions in, 6: 1881(J)
neutron low-energy resonances in, 6: 5427
neutron total cross sections as function of wavelength, 6: 3674
pair-production and Compton scattering in, 6: 4967(J)
photoelectron emission from, 6: 1295(J)
polarographic determination in presence of thiocyanate, 6: 2609(J)
primary specific ionization in, at high energy, 6: 4832(J)
proton elastic scattering cross sections, 6: 3422(J), 5692(J), 6179
proton reactions (p,π), cross sections, 6: 3825
proton scattering cross sections, 6: 1546
radiation damage and recovery in, 6: 4978(R)
radioactivity induced in, by neutron bombardment, 6: 2195(J)
self-diffusion in, 6: 5389(R)
self-diffusion in, effects of impurities on, 6: 6613
self-diffusion in, effects of Pb additions on, 6: 2932(R)
self-diffusion in, tracer method of measuring, 6: 2375
self-diffusion in pure polycrystalline, 6: 4504
sintering, kinetics of, 6: 5388(R)
slip, nature of, 6: 5388(R)
spectrophotometric determination, 6: 4724(R)
Silver (cont'd)
sputtering, induced by argon ions, 6: 5121(J)
wettability by glasses, 6: 201(R)
wettability by sodium silicates, 6: 4780
x-ray spectra, 6: 97(J)
Silver–aluminum alloys
annealing mechanism in, electron microscope studies of, 6: 2093(J)
fatigue mechanism in, 6: 1248(J)
lattice-spacing relations in, 6: 6075(J)
x-ray diffraction analysis, 6: 5108(R), 5109(R)
Silver–antimony couples
grain-boundary diffusion, tracer study, 6: 6602
Silver bromides
preparation, 6: 89
viscosity of liquid, temperature dependence of, 6: 6031(J)
Silver chloride crystals
nuclear interaction of cosmic rays in, 6: 1760(J)
Silver chlorides
preparation, 6: 89
Silver complexes
with iodomercurates, structure and stability, 6: 4403(J)
Silver–copper alloys
anisotropy of diffusion in grain boundaries, 6: 6610(R)
Silver cyanates
preparation of $C^{14}$-labeled, 6: 4026(J)
Silver films
Hall coefficient and conductivity of, measurement of, 6: 3290
Silver fluorides
preparation by $ClF_3$ fluorination, 6: 2618(J)
Silver–gold alloys
diffusion in, 6: 603(R)
heat of formation and solution, 6: 4507(R)
self-diffusion, 6: 5388(R)
Silver–gold couples
porosity of, metallographic studies on, 6: 1474
Silver isotopes
decay schemes, 6: 3056(J)
production by α, d, or n bombardment of Cd isotopes, 6: 3056(J)
Silver isotopes $Ag^{106}$
formation from $Ag^{107}$ (n,2n), 6: 2195(J)
Silver isotopes $Ag^{107}$
electron emission spectra, low-energy, 6: 3872(J)
neutron activation cross sections, 6: 2168
neutron reactions (n,2n), 6: 2195(J)
Silver isotopes $Ag^{108}$
formation from $Ag^{109}$ (n,2n), 6: 2195(J)
Silver isotopes $Ag^{109}$
Auger coefficients for, determination of, 6: 2150(J)
electron emission spectra, low-energy, 6: 3872(J)
isomeric transition, 6: 409
neutron activation cross sections, 6: 2168
neutron reactions (n,2n), 6: 2195(J)
neutron resonances in, 6: 2468(R)
tritium reactions, 6: 3111(J)
Silver isotopes $Ag^{110}$
beta emission and conversion electrons, 6: 3713(J)
gamma cross sections, 6: 2167
gamma spectra, 6: 421(J)
Silver isotopes $Ag^{111}$
lung deposition of colloids of, 6: 3191(J)
separation from Pd, 6: 3543(J)
yield from proton and neutron fission of U, 6: 3845
yield from proton-induced fission of U, 6: 1856, 3406
Silver–lead alloys
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
Silver–palladium couples
porosity of, metallographic studies on, 6: 1474
Silver single crystals
sintering, 6: 603(R)
Simulators
(See equipment or processes, and component or characteristic simulated; see Computers.)
Single crystals
(See also by name of materials, e.g., Copper single crystals.)
anomalous transparency of thick, to x rays, 6: 2411
critical shear stresses in, method for determining ratios, 6: 1155
crystallographic aspects of slip in body-centered cubic, theory of, 6: 1154
electron energy levels in, 6: 1272(J)
growing, techniques and equipment for, 6: 6412
neutron-diffraction analysis, 6: 721(J), 6091
neutron reflection from, 6: 493(J)
nuclear electric quadrupole interaction in, 6: 4931(J)

Single crystals (cont'd)
nuclear quadrupole spectra, 6: 344(J)
plastic deformation, 6: 1470(R)
plastic deformation, effect of fixed or rotating holder on, 6: 6614(J)
preparation, 6: 2099(J)
preparation, apparatus for, 6: 1156(J)
strain hardening, 6: 3324
structure determination of, from neutron diffraction data, 6: 619(J)
x-ray absorption corrections for, 6: 4805(J)
x-ray diffraction analysis, 6: 617
Sintering
(See as subheading under materials.)
bibliographies on, 6: 602
Skin
absorption of $Ra^{224}$ in, when applied in ointment and in lacquer vehicles, 6: 4711
burns produced by thermal radiation, type and relation to energy delivery rate, 6: 4350
cytological and histological effects of $\alpha$ irradiation on, compared with effects of x irradiation, 6: 2267(J)
effects of $\beta$ particles on, 6: 4702(J)
effects of $\beta$ particles on, of pigs, 6: 4703(J)
effects of radiation on, 6: 506(R)
effects of radiation on, as modified by metabolic level and temperature, 6: 1958(J)
exposure time-dose relationship for thermal radiation, 6: 4349
fluorescence after x irradiation, 6: 6512(R)
Skin diseases
occurrence of, following administration of $I^{131}$ in hyperthyroid therapy, 6: 1087(J)
therapy with $As^{76}$, 6: 1614(J)
Slow neutrons
(See Thermal neutrons.)
Slurries
mechanical properties, bibliography, 6: 5367
Smokes
diffusion in the atmosphere, 6: 756
diffusion in lower layers of the atmosphere, 6: 576(R), 1516(R), 1517(R), 1518(R), 1519(R), 1520(R)
dispersal of, effects of velocity and temperature of discharge on, 6: 675
oil, dispersion from 100-m chimney at BNL, 6: 5853(J)
Snow
radioactivity in, on Puy de Dome, France, 6: 1358(J)
Soddyite
crystal structure, chemistry, and occurrence, 6: 4501(J)
Sodium
adsorption on pyrites, 6: 4497(R)
analysis for Ca, Mg, and K, 6: 815
analysis for O, 6: 4751
atomic weight, 6: 3972(J)
chromatographic separation from Li, 6: 848(J)
combustion in controlled atmosphere, 6: 1630
determination by pile activation, 6: 549(J)
diffusion coefficients in albite, 6: 5368(R)
diffusion in aqueous HCl solutions, tracer studies of, 6: 2350(J)
distribution following acute whole-body irradiation, 6: 2292(J)
effect of radiation on elastic constants, 6: 6475(J)
electrolytic conductance and self diffusion in ion exchange membranes, correlation between, 6: 2586
heat of reaction with water at 25°, 6: 1132(J)
infrared spectra of, calculations, 6: 161(J)
intracellular, determination by isotope dilution technique, 6: 2847(J)
metabolism in x-irradiated dogs, 6: 510(R)
neutron capture cross sections, 6: 4880(J)
neutron total cross sections, 6: 1017(J)
neutron transmission cross sections, 6: 2479(J)
pathological effects on Drosophila development, 6: 5964
permeability of human erythrocytes to, 6: 2577
proton scattering by, 6: 2710
purification of commercial grade, apparatus for, 6: 3572
reaction with NaOH, 6: 5569
self-diffusion in solid, 6: 5785(J)
self-diffusion in solid, effect of pressure on, 6: 5784(J)
spectrographic determination, in organic solids, 6: 158
temperature-entropy diagram for, in the mixed phase and superheated region from 900 to 1600°K, 6: 2088
toxicology, 6: 2279(R)
vapor pressure, 6: 1670
vapor pressure in range 500-1200°C, 6: 5117(R)
Sodium (labeled)
preparation by exchange with labeled NaCl, 6: 1395(J)
Sodium (liquid)
compressibility, temperature variation of, 6: 580(J)
Sodium (liquid) (cont'd)
sampler and extraction apparatus for, 6: 5376
thermal conductivity, 6: 232, 1444(J)
viscosity, temperature dependence of, 6: 6031(J)
Sodium acetates
heat of solution in water and acetic acid, 6: 3956
isotopic exchange reactions of, 6: 1626
metabolism in fasted rat, 6: 3952(J)
Sodium–aluminum–germanium alloys
phase studies, 6: 6366(J)
Sodium borates
coloration, 6: 142(J)
effects of Ra radiation on photoelectric current in, 6: 1168(J)
Sodium borohydrides
exchange reactions with H gas, 6: 1178
Sodium bromide–sodium sulfate systems
fused, phase studies of, 6: 1398(J)
Sodium carbonate–uranium carbonate–water systems
phase studies, 6: 180
Sodium chloride crystals
luminescence of x-irradiated, excitation conditions, 6: 6476(J)
migration of $S^{35}$ in, in electric field, 6: 5006(J)
thallium-activated, properties of, 6: 2441(J)
Sodium chloride single crystals
strain hardening, 6: 3324
Sodium chloride–sodium sulfate systems
fused, phase studies of, 6: 1398(J)
Sodium chloride–water systems,
electric conductivity and phase studies, 6: 2678(R)
Sodium chlorides
absorption and fluorescence of Ag-activated, 6: 3007(J)
activity coefficients, 6: 2643(J)
coloration and luminescence of, radiation-induced, 6: 142(J)
electric conductivity and density, 6: 2862
hyperfine structure by molecular-beam magnetic-resonance method, 6: 2736(J)
ionization, 6: 541(J)
luminescence spectra of Ni- and Cu-activated, 6: 3633(J)
melting of, mechanism of structure breakdown in, 6: 118
microwave absorption spectra at high temperatures, 6: 4674(J)
photoelectric current in, moment of, 6: 1168(J)
self-absorption and self-scattering of $\beta$ particles by, 6: 1344
vapor pressure determination, 6: 1239(R)
Sodium dithionites
radiosensitivity effects, 6: 46, 48
radiosensitivity effects on Escherichia coli, 6: 4705(J)
Sodium fluoferrates
infrared spectrum, 6: 1667(J)
Sodium fluophosphates
crystal structure, 6: 3973(J)
Sodium fluoride–beryllium fluoride systems
phase studies, 6: 3527(J)
Sodium fluoride–cryolite systems
cryoscopy in eutectic, 6: 3221(J)
Sodium fluorides
hyperfine structure by molecular-beam magnetic-resonance method, 6: 2736(J)
Sodium formates
hydrogen-deuterium exchange in aqueous, 6: 3981(J)
metabolism of, effects of aminopterin on, 6: 2280
radiosensitivity effects, 6: 46
Sodium hydrides
dissociation pressure in vacuo, 6: 5569
Sodium–hydrogen–oxygen systems
phase studies, 6: 5569
Sodium hydrosulfites
(See Sodium dithionites.)
Sodium hydroxides
determination in presence of $Na_2CO_3$, 6: 109
reaction with Na, 6: 5569
solubility of NaO in, 6: 5569
Sodium hydroxides (liquid)
connective heat transfer coefficient in turbulent flow of, techniques and problems of determining, 6: 6589
corrosion of Fe cathodes during electrolysis of, 6: 5102(J)
Sodium iodide crystals
in gamma-ray spectrometers, 6: 647
neutron-density measurements with Tl-activated, 6: 4880(J)
polishing techniques for, 6: 1810(J)
preparation, 6: 646
protective containers for, 6: 1811(J)
resolving power as scintillation detector for $\gamma$ rays, 6: 6415(R)
response to charged particles, 6: 966(J)
thallium-activated, packaging of, 6: 2974(R)

Sodium iodide crystals (cont'd)
thallium-activated, response to high-energy protons, 6: 6665
thallium-activated, response to neutrons, 6: 4590(J)
Sodium iodides
luminescence, temperature effects on, 6: 6125(J)
scintillation and luminescence of pure and Tl-activated, 6: 302(J)
thallium-activated, pulse height vs. energy curve, 6: 2145(J)
Sodium ions
collision of negative, with atoms, 6: 3705(J)
sorption on glass from aqueous solutions, 6: 2894(J)
Sodium isotopes
nuclear properties, 6: 1928
Sodium isotopes $Na^{21}$
beta spectra and half lives of, 6: 735
positron spectrum, half life, and $\gamma$ radiation accompanying decay of, 6: 3869(J)
Sodium isotopes $Na^{22}$
gamma spectra, 6: 2708
Sodium isotopes $Na^{23}$
deuteron reactions (d,p), 6: 2752
energy levels, from inelastic proton scattering, 6: 5456(R), 5462(J), 5495(J)
energy levels, from $Mg^{25}$ (d,$\alpha$), 6: 4226(J)
gyromagnetic ratio, 6: 3059(J)
interaction constants for, in NaCl and NaF, 6: 2736(J)
mass of, measurement, 6: 1284(J)
neutron absorption of, for GLEEP calibration, 6: 2180(J)
nuclear magnetic moments, 6: 995(J)
nuclear magnetic resonance absorption-line broadening in metal, 6: 6445(J)
proton reactions (p,$\alpha$), energy of, 6: 2185(J)
proton reactions (p,n), excitation functions for, 6: 1021(J)
proton reactions (p,n), $Mg^{23}$–$Na^{23}$ mass difference from threshold for, 6: 3849(J)
proton reactions (p,n), threshold determination, 6: 5474(R)
sign of quadrupole interaction energy of, in $Na_2$ and Na halides, 6: 3836(J)
Sodium isotopes $Na^{24}$
disintegration energy, 6: 2185(J)
ejection from foil in high-energy bombardment of Al, 6: 3077
energy levels from $Na^{23}$ (d,p), 6: 2752
formation by proton bombardment of Cu, 6: 700
in measurement of blood circulation, 6: 5974(J)
nuclear spin, 6: 1909
in therapy of bladder carcinoma, 6: 5963(J)
tracer application in wear of plastic gears and parts, 6: 4054(J)
Sodium neptunyl acetate
magnetic susceptibilities, measurements of, 6: 2242
Sodium nitrates
effects of radiation on, 6: 2253(R)
viscosity of liquid, temperature dependence of, 6: 6031(J)
Sodium nitrites
effects of radiation on, 6: 2253(R)
protective action against radiation injuries to mice, 6: 5956(J)
radiosensitivity effects, 6: 23
Sodium oxides
crystal structure of $NaO_2$, 6: 5745
reaction with $H_2$, 6: 5569
solubility in K and NaK, 6: 1237
solubility in NaOH, 6: 5569
Sodium phosphates
as antidote in U poisoning, 6: 4380
metabolism and toxicology of Na hexametaphosphate, 6: 4380
toxicity, distribution, and excretion of, in rats, 6: 2833
Sodium plutonyl acetates
magnetic susceptibility, 6: 4762, 5588(J)
Sodium–potassium alloys
analysis for C, 6: 3229
solubility of oxygen in, 6: 1237
spectrochemical analysis for Hg, 6: 2013
thermal conductivity, 6: 6587
Sodium–potassium alloys (liquid)
molecular structure, by x-ray-diffraction analysis, 6: 5391(J)
sampler and extraction apparatus for, 6: 5376
thermal conductivity at 200 to 815°C, 6: 232
Sodium salicylate
radiosensitivity effects in mice, 6: 3915(J)
therapeutic use in Be poisoning, 6: 2376, 4691(R)
Sodium silicates
wetting of metals by, 6: 4780
Sodium space
determination and comparison with bromide, chloride, and inulin space in dogs, tracer study, 6: 5970
Sodium sulfates
adsorption of dissolved "impurities" in, on liquid surfaces, 6: 176(J)
Sodium sulfites
protective effects in neutron inactivation of enzymes, 6: 3916(J)
Sodium tungsten bronze
light absorption by thin red sputtered films of, 6: 4804(R)
Sodium uranyl carbonate systems
phase studies, 6: 180
Sodium uranyl carbonates
preparation and chemical properties, 6: 2905(J)
Soil
moisture and density measurement by neutron and gamma scattering, 6: 6376(J)
moisture determination by neutron scattering, 6: 3968(J)
nutrient value, bibliography on tracer studies in, 6: 5726(J)
Solid solutions
(See also subheading constitution diagrams under specific materials.)
properties of binary, statistical theory of, 6: 1153
thermodynamic stability of, factors affecting, 6: 1467(R)
Solid-State and Molecular Theory Group, Mass. Inst. of Tech.
progress reports, 6: 4179(R), 6674(R)
Solid-state reactions
tracer techniques, 6: 2857
Solids
distillation, apparatus for, 6: 5062
effects of radiation on, bibliography, 6: 5694
effects of surface polarization on wetting, 6: 5732
empirical range-energy relations for protons in, 6: 2198
erosion by impingement of particles on, 6: 185
quantum theory, 6: 4085(R)
quantum theory of many-electron problem in, 6: 754(J)
radiation damage distribution in, and method for producing uniform damage, 6: 2774(J)
self-diffusion, as measure of rate processes, 6: 6301(R)
soluble problem in energy bands in quantum theory of, 6: 4675
structure of energy bands in, 6: 2166(R)
surface-area measurement of porous, 6: 1426
temperature and stress distribution in, equations for, 6: 863
theory of, 6: 1750(R)
thermal properties, techniques of measuring, 6: 5790(R)
Solutions
(See also subheading solubility under materials.)
classification of, applied to analytical problems, 6: 2310
energy absorption by externally irradiated, 6: 1343
fluorescence of, under $\gamma$ and $\alpha$ irradiation and dependence on concentration of solutes, 6: 1749(R)
organic liquid, high-energy induced fluorescence in, 6: 2716(J)
Solvent extraction processes
(See also solvent extraction as subheading under material being extracted.)
bibliographies, 6: 1693(J)
factors influencing extraction of salts by, theory, 6: 6333
for $Pu^{239}$, $U^{233}$, and $U^{235}$, 6: 6574
in Podbielniak centrifugal extractor, 6: 5758
theory, 6: 1686
Solvents
(See also specific substances used as solvents.)
influence of mixed, on solubilities of salts, 6: 100(J)
thermodynamic properties of mixed aqueous-organic, 6: 1631
Sonic inspection
(See also subheading internal defects under specific materials.)
of bonds between concentric metal cylinders, 6: 4478
Sound
effects on mixtures, review, 6: 286
Spallation products
(See also as subheading under materials spalled.)
half lives, from proton-bombarded Cs, Co, I, Ni, V, and Y, 6: 5875(R)
separation, 6: 4724(R)
separation of elements from Cr through As, 6: 5298(R)
yields, analysis of, 6: 5454(R)
Spark detectors
design and performance, 6: 5450(J)
design and performance of wire, for $\alpha$ particle detection, 6: 4869
in detection of U fission fragments, 6: 5648(J)
Spark shadowgraph photography
in study of liquid jet hydrodynamic characteristics, 6: 5252
Spectra
(See also as subheading under specific materials; also subheadings for types of spectra by radiation; see also main headings by name of radiation, e.g., Gamma spectra; see also Absorption spectra; Emission spectra.)
configuration interaction in iron-group elements, 6: 4672
fine structure in H-like atoms, theory, 6: 6724(J)

Spectra (cont'd)
isotope shift in, and nuclear shell structure, 6: 3841(J)
magic numbers and isotope shift in, 6: 3047(J)
tables of corresponding K and angstrom units, 6: 4446(J)
wavelength units, 6: 4445(J)
Spectrographic analysis
(See also as subheading under specific materials.)
excitation stand for, design, 6: 5074
for isotopic composition of elements, 6: 1573(P)
of perchloric acid solutions, resistant electrodes for, 6: 2638(J)
of refractory materials, carbon effect in, 6: 160(J)
volatilization rate of elements in He d-c arc, 6: 2807(J)
Spectrometers
(See also Beta spectrometers; Gamma spectrometers; Mass spectrometers; Neutron spectrometers; Spectrographic analysis.)
adjustable supports for reflectors, design of, 6: 3467(P)
axial focusing in, theory of, 6: 2717(J)
curve analyzer for automatic separation of spectrum components, 6: 5399(R)
double channel coincidence type, design, 6: 1499
échelle, with high speed and resolving power, 6: 6203
focusing in, with sector-shaped, uniform magnetic field, 6: 450(J)
hollow-crystal, development of, 6: 3335
lens-type pair, design, 6: 2712
light sources for, design, 6: 2346
in nuclear energy level investigations, 6: 424(J)
pulse amplitude analyzers for, 6: 5441(J)
scintillation, design and improvement of resolving power of, 6: 1511
trajectories in an axial focusing double lens, 6: 1795(J)
two-meter crystal, design, 6: 446(R)
Spectrophotometers
for cytochemical study, design, 6: 1374
design, 6: 5830(R)
sensitivity, 6: 5311(R)
Spectroscopy
(See also the subheading spectra under specific materials; see also Spectrographic analysis; Spectrometers.)
bibliography, 6: 5921(J)
conference on molecular, in Basel, 6: 448
in determining nuclear moments and isotope-shift phenomena of stable isotopes, 6: 3064(J)
effect of intrinsic moment of electron on isotope shift, 6: 3129(J)
of radioactive molecules, principal problems in, 6: 443
Spectroscopy Lab., Univ. of Chicago
progress reports, 6: 1302(R)
Sperm
effects of radiation on respiration in, 6: 1084
effects of radiation on sea urchin, 6: 3486
physiology of, radiation effects on, 6: 3896(R)
Spermatogenesis
in adult albino rat, electron microscope studies of, 6: 2560
in grasshoppers, cinematography of binucleate cell formation in, 6: 5714
Sphalerite
flotation with mercaptans, 6: 3294(R)
surface area measurements, 6: 3293(R)
Spheres
preparation of precise, and technique for drilling small holes in, 6: 861
preparation of radioactive plastic micro-, 6: 5932(J)
velocity and pressure distribution of liquids flowing in, 6: 1440(R), 1441(R)
Spin
(See subheadings spin and nuclear spin.)
Spinels
(See also specific materials.)
thermal conductivity, 6: 204
Spleen
blood coagulation following x irradiation of, 6: 3906(J)
blood perfused, supernatant plasmas of, for radiation protection, 6: 763
desoxypentose nucleic acid content of nuclei of cells of, 6: 5250
effects of radiation on cells, 6: 5259
effects of radiation on Fe concentration of, 6: 4363(J)
effects of shielding and removal of, on antibody formation in rats receiving total-body x irradiation, 6: 2562(R)
effects of shielding of, on radiation injuries, 6: 763, 4689(R)
effects of shielding of, on radiation protection afforded by plasma and White's medium perfused through, 6: 2564
effects of splenectomy on mortality following x irradiation, 6: 4694(R)
effects of x irradiation on enzyme systems of, in the mouse, 6: 6247(J)
homogenates of, in therapy of radiation injuries, 6: 2824
Spleen (cont'd)
lactate metabolism in, 6: 171(J)
radiosensitivity, 6: 3888(R)
radiosensitivity effects, 6: 2279(R), 2559(R)
regeneration following whole-body irradiation, thyroidectomy effect on, 6: 5013(J)
role in x-radiation injury, 6: 520(R)
shielding of, during x irradiation, 6: 516(R)
uptake of $P^{32}$ by, effects of sodium pentobarbital on, 6: 2568
Spontaneous fission
rates of, method of plotting, 6: 3410(J)
Sputtering
(See also as subheading under specific materials.)
mechanism for, in high vacuum, 6: 5121(J)
Squirrels
physiology of hibernating and normal, effects of radiation on, 6: 5550(R)
Stable isotopes
(See also specific stable isotopes.)
application to biochemistry, bibliography, 6: 5727(J)
chemical separation, bibliography, 6: 5821(J)
electromagnetic separation, purification, analysis, and uses, bibliography on, 6: 5823(J)
nuclear moments and isotope-shift phenomena of, measurement by atomic spectroscopy, 6: 3064(J)
periodic system of, 6: 6108(J)
production, separation, and applications of, 6: 287(J)
properties, lecture on, 6: 1261
separation by calutrons, 6: 1791
Stack disposal
(See also Fission products; Meteorology; Radiation.)
efficiency of I scrubbers, 6: 6511(R)
filters for use in, 6: 2913(R)
iodine removal using a Cottrell electrostatic precipitator, 6: 1092
in metallurgical and mineral industries in Los Angeles County, Calif., 6: 3737
meteorological factors in, at BNL, 6: 780
method for, at ANL, 6: 518(J)
removal of F-containing particles and gases, 6: 6037(J)
Stainless steel
cathodic sputtering, 6: 252
chemical corrosion tests of welded samples of type 347, 6: 4059
corrosion, 6: 2920(R), 2921(R)
corrosion, intercrystalline, by $HNO_3$ and $H_3PO_4$, 6: 5103(J)
corrosion, marine, 6: 5100(J)
corrosion by acids, 6: 1217
corrosion by Bi–Pb eutectic, 6: 901
corrosion by $H_2O_2$, 6: 240(J)
corrosion by knife-line attack, 6: 6051(J)
corrosion by liquid Bi, 6: 900
corrosion by $HNO_3$ and HCl in ammonium acid fluoride solutions, 6: 4058
corrosion by $H_3PO_4$ aerated with He and by Ca and Na hypochlorite, 6: 1236
corrosion by water, 6: 4776(R)
corrosion of nitrided, in degassed and oxygenated water, 6: 3780
corrosion of welded samples, 6: 4494
corrosion resistance in aqueous inorganic chlorides, 6: 6048(J)
corrosion resistance in mineral acids, 6: 6049(J)
cracking in welding of type 347, 6: 4068
effects of liquid Bi–Pb alloy on, 6: 1723
effects of radiation on mechanical properties, 6: 3783
electrochemical corrosion, 6: 593
fatigue strengths, testing of, 6: 2087
friction coefficients and surface damage of, 6: 2672
high temperature testing of type 316, 6: 2666(R)
mechanical properties at high temperatures, 6: 2930
permeability to gases, 6: 1230(R)
permeability to He, 6: 272
solubility in liquid Pb, Bi, and Bi–Pb alloy, 6: 5602
spectrographic analysis, 6: 2664
thermal and electric conductivities at high temperatures, 6: 2652(J)
thermal conductivity at 200 to 815°C, 6: 232
welding, effect of composition and microstructure on, 6: 6066
Standard reactors
(See Sigma piles.)
Stanford Research Inst.
progress reports, 6: 4440(R)
Stanford Univ.
progress reports, 6: 2650(R)
Stars
oscillations of model with one degree of freedom sustained by thermonuclear energy release, 6: 6080(J)

Statistics
(See also Mathematics.)
applied to combining errors involving a calibration curve, 6: 3623
matrix techniques, applied to directional correlation of radiations, 6: 6115
in study of properties of solid solutions, 6: 1153
Steam
solvent properties, 6: 4728
thermodynamic properties at pressures up to 10,000 psia, 6: 2065
Steam engineering
power recovery at Brookhaven, 6: 489, 490
single and double reheat cycles for steam power plants, 6: 3265
use of clean hot radioactive air that has cooled a reactor for a steam boiler, 6: 2064
Steam power plants
cycle analysis of, for use with water-cooled reactors, 6: 4681
Steel
(See also Stainless steel.)
behavior in the V-notch Charpy test, 6: 902
cathodic protection in water, 6: 6040(J)
ceramic coatings for protection at elevated temperatures, 6: 6595
combustion analysis for carbon, 6: 592
corrosion, marine, 6: 5100(J)
corrosion by acids, 6: 1217
corrosion by liquid metals, 6: 5601
dynamic coefficients, 6: 245(J)
fatigue properties, statistical nature, 6: 4488
fatigue resistance to combined stresses, 6: 6350
fracture tests of martensite, V-notch Charpy, 6: 6034
friction coefficients and surface damage of, 6: 2672
interfacial effects betweeen Hg and, 6: 4483
metallography of, with polarized light, 6: 1228
metallurgical effects of rare earth addition to cast, 6: 6367(J)
microstructure at elevated temperatures, 6: 3788
notch sensitivity of, effect of quench-aging on, 6: 1730
permeability to H, mechanism of, 6: 3786
phosphate glasses as corrosion inhibitors for, 6: 6041(J)
photometric analysis for Al, 6: 1139(J)
solubility in liquid Pb, Bi, and Bi–Pb alloy, 6: 5602
tensile properties, effects of low temperature on, 6: 2665(R)
tensile properties, stress-strain effects at elevated temperatures, 6: 3788
tensile properties, testing, 6: 3789
thermal and electric conductivities at high temperatures, 6: 2652(J)
transformation of retained austenite in, 6: 595
uranium-contaminated scrap, sale by AEC, 6: 5954(J)
wetting with Hg, contact angle measurements, 6: 6067(R)
Stellite
(See Cobalt alloys.)
Sterility
(See also as subheading under radiations and animals.)
induced by fetal x irradiation of mice, 6: 5947(J)
x-ray induced, in female Drosophila, 6: 5263
Sterilization
of food and drugs by ionizing radiation, 6: 2253(R), 2330(J), 2356(R), 2569(R)
of foods, by $Co^{60}$ source, 6: 3889(R)
of milk and foods, by radiation, 6: 4353(R)
Steroids
chromatographic analysis, 6: 4016
effects on carbohydrate metabolism, 6: 4352(R)
effects on citrate synthesis, 6: 2557(R)
synthesis of labeled, 6: 2293(J)
tissue distribution, excretion, and physiological effects of, 6: 2293(J)
Stilbene
polarographic behavior in acetonitrile, dimethylformamide, and methanesulfonic acid, 6: 2598
scintillations in, 6: 961
scintillation properties of various forms of, 6: 2444(J)
Stilbene crystals
fluorescence of $\alpha$-irradiated, mechanism, 6: 4979(J), 5227(J)
preparation, 6: 962(R)
response to charged particles, 6: 966(J)
4,4-Stilbenedicarboxamidine
retention in liver cells, 6: 496(R)
Stirring apparatus
simple air-pulsed, design, 6: 6561
Stomach
effect of ACTH on secretions of, 6: 7
Storage tubes
for Williams memory system, testing, 6: 4559
Strain gages
design, 6: 5830(R)
Strain gages (cont'd)
design, calibration, and performance of wire resistance, 6: 936
Streptomycin
effects on radioinduced mutation in E. coli, 6: 4366(J)
microbiological synthesis of $C^{14}$-labeled, 6: 4761(J)
in therapy of radioinduced bacteremia, 6: 1384
Strontium
bone deposition, 6: 1389
bone depositon, effects of chemical agents on, 6: 69
bone deposition as function of parenteral dosage, in rats, 6: 5971
bone deposition in rabbits, tracer studies, 6: 5041(J)
chromatographic separation from Ba, Ca, and Mg, 6: 848(J)
determination in presence of Ba and Ca by flame photometry, 6: 3752
distribution in bones of growing pig, 6: 2842(J)
ion exchange with U in uranyl nitrate, 6: 76
removal from $H_2O$, ion exchange resins for, 6: 6512(R)
removal from $H_2O$, phosphate coagulation in, 6: 6576
tissue distribution, 6: 3896(R)
tissue distribution in cattle, 6: 2287(R)
tissue distribution in laying hens and eggs, 6: 5940(R)
x-ray spectra, 6: 97(J)
Strontium complexes
with fatty acids, formation constants of, 6: 77
Strontium fluorides
chemical reactions producing HF, thermodynamic equilibria in, 6: 6557
Strontium isotopes
radioactivity and nuclear reactions, 6: 3110(J)
Strontium isotopes $Sr^{85}$
decay schemes, 6: 2221(J)
decay schemes of ground and metastable states of, 6: 2776
Strontium isotopes $Sr^{86}$
mass, 6: 3055
Strontium isotopes $Sr^{88}$
mass, 6: 3055
Strontium isotopes $Sr^{89}$
preparation of carrier-free, 6: 1422
Strontium isotopes $Sr^{90}$
beta-ray energy in mixture of $Sr^{90}$ and $Y^{90}$, 6: 6718(J)
as beta source for treatment of corneal lesions in dogs, 6: 6284(J)
beta spectra, 6: 735, 3114(J)
Strontium selenides
solid solutions with Ce selenides, 6: 4012(J)
Strontium sulfides
depilatory effects on rat skin, 6: 4345
solid solutions with Ce sulfides, 6: 4012(J)
Strontium uranyl carbonates
preparation and properties, 6: 5087(J)
Structures
design of, to resist conventional and atomic blasts, 6: 2907
Styrene
gamma-induced polymerization of, kinetics, 6: 1552(R)
Styrene polymers
alpha particle stopping power of, relative to acetylene, 6: 4237(J)
anthracene or p-terphenyl in, internal absorption of fluorescent light in, 6: 5647(J)
scintillation properties of p-terphenyl and tetraphenylbutadiene in, 6: 6422(J)
Styrenes
properties and synthesis, 6: 1177(R)
Succinamide, N-diethylene-
synthesis of tritium-labeled, from dicarboxymethylacetylene, 6: 5075
Succinic acid
effects of radiation on aqueous, 6: 2888(J)
syntheses of tritium- and deuterium-labeled, from dicarboxymethylacetylene, 6: 5075
Sucrose
biosynthesis in canna leaves, role of glucose and fructose in, 6: 6523
chemical action of invertase on, products formed, 6: 5966
hydrolysis by invertase, 6: 1704(J)
metabolism in the mouse, 6: 5968
production in photosynthesis, 6: 167
storage in maize stalks, 6: 2804
Sugars
(See also the specific sugars; see also Carbohydrates.)
chromatographic separation, 6: 4033(J)
preparation and availability of labeled, 6: 5038(J)
separation by ion exchange, 6: 148, 843(J), 3767(J)
separation by ion-exchange chromatography, 6: 1989
synthesis of labeled, 6: 1430
Sulfanilic acid
synthesis of $S^{35}$-labeled, 6: 4457(J)
Sulfates
neutron bombardment of, forms of P resulting from, 6: 3238(J)

Sulfhydryl group
(See Mercapto group.)
Sulfides
exchange reactions with thiocyanate ions, 6: 87
Sulfur
activity coefficient of, in liquid iron and steel as affected by other elements, 6: 1990
determination in Fe by H reduction, 6: 1858(R)
microdetection, 6: 107
proton elastic scattering cross sections, 6: 3422(J)
spectra of flames of, with fluorine, 6: 2032(J)
thermodynamic properties at zero pressure, 6: 3803
Sulfur coatings
on a mirror surface, 6: 1304(R)
Sulfur compounds
radiosensitivity effects on Escherichia coli, 6: 4705(J)
Sulfur dioxide–heptane systems
diffusion in, 6: 537
Sulfur dioxides
structure and dipole moment of, determined by microwave spectroscopy, 6: 3380(R)
Sulfur fluorides
dielectric properties, for use in Van de Graaff accelerators, 6: 5486(R)
infrared spectrum of $S_2F_{10}$, 6: 1411(J)
intermolecular forces in, 6: 2880(J)
Sulfur–iron–oxygen systems
equilibrium and vapor pressure in, 6: 6609
thermodynamic properties, 6: 3748(R)
Sulfur isotopes
ratio in igneous rocks and sulfide ores, 6: 2661(J)
Sulfur isotopes $S^{31}$
beta spectra and half lives, 6: 735
half life, 6: 4932(J)
Sulfur isotopes $S^{32}$
abundance in nature, 6: 1793
binding energy of, calculation, 6: 333(J)
energy levels of excited states, 6: 6171(J)
gamma reactions (γ,n), cross section, 6: 4932(J)
gamma reactions (γ,np), 6: 1871(J)
mass, 6: 991(J), 1553
Sulfur isotopes $S^{33}$
decay scheme, 6: 3122(J)
mass, 6: 991(J)
nuclear magnetic moment of, by microwave spectroscopy, 6: 2480(J)
Sulfur isotopes $S^{34}$
abundance variations in native S and pyrites, 6: 4860(J)
mass, 6: 991(J)
proton reactions (p,n), excitation functions to 100 Mev, 6: 6448(J)
Sulfur isotopes $S^{35}$
beta spectra, 6: 954(R)
beta spectra, by nuclear-emulsion method, 6: 1560(J)
determination of tracer, in liquids and bacterial suspensions, 6: 3955(J)
in diagnosis and therapy of chondrosarcomas, 6: 5723(J)
nuclear properties, 6: 1928
radiation from, backscattering of, 6: 3364(J)
radioautographic uses, 6: 795(J)
self-absorption of low-energy β particles from, 6: 3097(J)
Sulfur isotopes $S^{36}$
mass, nuclear spin, and relative abundance of, 6: 340(J)
Sulfur trioxides
photosynthesis, using γ radiation from $Co^{60}$ source, 6: 5353
Sulfuric acid
as nucleating source in aerosol formation, 6: 3306(R)
viscosity, temperature dependence of, 6: 6031(J)
Sulfuric acid–phenol systems
diffusion in, 6: 804
Sun
effect of sun spot activity on cosmic ray intensity, 6: 6638
Superconductivity
(See also as subheading under materials.)
bibliography, 6: 5795(J)
in borides, carbides, and nitrides, search for, 6: 2104
electron-phonon theory of, 6: 3327(J)
isotopic effect in, of Hg, 6: 993(J)
isotope effect in, of Sn and Pb, 6: 3617(J)
Superconductors
adiabatic magnetization of, at temperatures below 1°K, 6: 2681(J)
audiofrequency experiments in, 6: 920(J), 2952(J)
boundary between normal and superconducting states of, formation of, 6: 2671(J)
crystal structure, neutron diffraction studies at low temperatures, 6: 6624(R)
magnetic and thermal properties, 6: 3299(R)
properties of Zr, Hf, Cd, and Tl, below 1°K, 6: 6371
Supersonic flow
equations for, 6: 2070(J), 4051(J)
behind forked junction, theory of, 6: 2072(J)
Surface reactions
tracer studies, bibliography, 6: 5763(J)
tracer techniques for study of, 6: 3769
Surface tension
(See also as subheading under specific materials.)
measurement of, by glasses, 6: 202
Surfaces
area measurements of metals, 6: 897
area measurement of porous solids, 6: 1426
polarization, effect on wetting of solids, 6: 5732
Survey meters (radiations)
(See Radiation detection instruments; Rate meters.)
Suspensions
(See also Colloids.)
dynamics of particulate matter in fluid, 6: 184
hydraulic conveying of, theory, 6: 6347(J)
sedimentation from, in relation to particle size, 6: 3582
in turbulent flow, diffusion theory of, and erosion by, 6: 6027(J)
Sweat cooling
(See also as subheading under materials and units cooled.)
protection achieved by, on porous metals, 6: 864
Sweden
radioactive sediments in southern, 6: 5600(J)
Swine
blood volume determinations in, 6: 504(R)
blood volume determinations in, $P^{32}$-labeled red blood cell method, 6: 2291(J)
effects of size on radiosensitivity, 6: 5940(R)
pathological effects of x radiation on, 6: 1950
Switzerland
radioactive springs in, 6: 6719(J)
Sylvania Electric Products, Inc.
progress reports, 6: 5388(R)
Synchrocyclotrons
acceleration of C and Be ions in, 6: 6691(J)
beam deflection in, 6: 356(J)
bibliography, 6: 5890(J)
design and beam characteristics, 6: 1883
design and construction of Univ. of Chicago 170-in., 6: 4230
Synchrometers
(See Mass spectrometers.)
Synchroscopes
(See Oscillographs.)
Synchrotrons
(See also Bevatron; Brookhaven synchrotron.)
d-c biasing, 6: 4962(J)
design, 6: 714(J)
design and operation, bibliography, 6: 5892(J)
frequency modulated accelerating system for, 6: 380(J)
non-ferromagnetic, design, 6: 1883
operation at MIT, 6: 5452(R)
operational characteristics of, 6: 3665
photon spectrum from electrons in, 6: 2498
proton, magnetic beam deflector for, 6: 4332(P)
at Purdue Univ., design and performance of, 6: 3411(R), 3854(R)
radiation loss by electrons in, measurement, 6: 4844(J)
radiation loss by electrons in, theory, 6: 3328(J)
target radiation in, angular distribution of, 6: 1885(J)
theory of, 6: 918
vacuum system for, 6: 586(J)
x-ray spectrum of, measurement, 6: 1028
Syracuse Univ.
progress reports on cosmic-shower experiments, 6: 2954(R)
Szilard-Chambers reactions
(See also as subheading under specific materials.)
of bromine ($Br^{80}$) isomers, difference between, 6: 2043(J)
of bromine isotopes, 6: 2883(J)
chemical separation by, 6: 1679(J)
effects of radiation on retention in, 6: 4001
enrichment of Sn activity by, 6: 2049(J)
with inorganic iodine compounds, 6: 4002
in neutron-irradiated quinoline oxalate, 6: 1167(J)
in phosphates, 6: 2626(J), 2887(J)
in phthalocyamine metal complexes, 6: 4017(J)


## T


T particles
identification in nuclear emulsions, 6: 6693

Tallow Face Mine (North Carolina)
pegmatite minerals of rare-earth type in, 6: 4496
Tantalum
activation determination in ores, 6: 1451
atomic radii, 6: 5607
chemical separation from Nb and Ti in HCl, 6: 2344(J)
chromatographic separation and determination, 6: 4018(J)
corrosion by Bi–Pb eutectic, 6: 901
corrosion by $H_2O_2$, 6: 240(J)
corrosion by liquid Bi, 6: 900
determination by chromatography on cellulose, 6: 6308(J)
determination in ores, 6: 2939(J)
emission spectra, atomic energy levels, and Zeeman effect, 6: 4281(J)
furnacing and casting, 6: 2384(J)
gamma absorption anomaly, 6: 2710
gamma absorption in, 6: 1533, 2203(J), 5456(R)
gamma reactions (γ,n), 6: 1538, 5486(R)
gravimetric determination in Ti and Ti alloys, 6: 3523, 5740
mechanical properties at high temperatures, 6: 2930
neutron resonances in, 6: 2468(R)
neutron scattering by, 6: 980
oxidation, cubic law of, 6: 1462
photon attenuation in, 6: 4594
physical properties of, bibliography on, 6: 905
proton elastic scattering cross sections, 6: 3422(J)
proton reactions (p,n), 6: 1859
proton reactions (p,n), thick-target yield in, 6: 1535
purification by volatilization or solution of chlorides, 6: 847(J)
radiation damage and recovery in, 6: 4978(R)
reactions with HCl, HBr, and $TaCl_5$, 6: 6537(J)
separation from Nb, 6: 846(J)
separation from Nb by solvent extraction, 6: 2636(J)
thermal capacity, 6: 560
x-ray absorption edges, 6: 3096(J)
Tantalum borides
crystal structure and properties, 6: 120
preparation and physical properties, 6: 4408(J)
Tantalum–boron systems
production of $BCl_2$ from, 6: 3462(P)
Tantalum bromides
preparation of $TaBr_3$ and $TaBr_5$, 6: 6537(J)
Trouton constants, 6: 810(J)
Tantalum carbide–titanium carbide–tungsten carbide systems
phase studies, 6: 1126(J)
Tantalum carbide–vanadium carbide–zirconium carbide systems
solubility relationships in, 6: 2074
Tantalum carbides
preparation, melting point, and crystal structure, 6: 3566(J)
Tantalum–carbon systems
lattice constants, 6: 5607
Tantalum–carbon–titanium systems
constitution diagrams, 6: 5607
lattice constants, 6: 5607
Tantalum chlorides
melting point, 6: 2003(J)
preparation of $TaCl_2$ and $TaCl_4$, 6: 6537(J)
reduction of $TaCl_5$ by Ta and $H_2$, 6: 6537(J)
Trouton constants, 6: 810(J)
Tantalum–chromium alloys
crystal structure of, from x-ray diffraction data, 6: 1249(J)
Tantalum electrodes
formation and polarization of anodic oxide films on, 6: 1227
Tantalum fluorides
vapor pressure, 6: 810(J)
Tantalum iodides
Trouton constants, 6: 810(J)
Tantalum–iron–nickel alloys
composition and physical properties, 6: 909(J)
Tantalum isotopes $Ta^{181}$
deuteron reactions (d,n), 6: 152
energy levels, 6: 4247(R)
energy levels, spins of, 6: 5511(J)
gamma absorption cross sections, 6: 1326
gamma cross sections, 6: 364, 1012(J), 1871(J)
gamma emission, angular correlations of, 6: 6624(R)
internal conversion in isomeric transition, 6: 5474(R)
Tantalum isotopes $Ta^{182}$
decay schemes, 6: 424(J), 444(R)
half life, 6: 4663(J)
Tantalum minerals
chlorination and distillation analysis, 6: 2608(J)
Tantalum–molybdenum alloys
phase studies, 6: 1256(J)
Tantalum nitrides
preparation, melting point, and crystal structure, 6: 3566(J)
Tantalum ores
activation analysis for Ta, 6: 1451
Tantalum oxide–niobium oxide systems
phase studies, 6: 2307(J)
Tantalum oxides
electrolysis in phosphate melts, 6: 811(J)
high-temperature modification of $Ta_2O_5$, x-ray-diffraction studies, 6: 4404(J)
Tantalum phosphides
preparation by electrolysis, 6: 811(J)
Tantalum–titanium alloys
constitution diagrams, 6: 5607
phase studies, 6: 1732
Tantalum–uranium alloys
chemical analysis, 6: 5050
Tantalum–zirconium alloys
phase studies and tensile properties, 6: 1475(R)
Targets
(See Radiation targets.)
Technetium
oxidation states, 6: 2000(J)
preparation, 6: 2892(J)
separation from fission products, 6: 1424(R)
Technetium isotopes
decay schemes, 6: 1907
Technetium isotopes $Tc^{92}$
isomeric transition in, 6: 5232
Technetium isotopes $Tc^{95}$
formation, 6: 3111(J)
Technetium isotopes $Tc^{96}$
formation, 6: 3111(J)
isomeric transition and positron branching in, 6: 5232
Technetium isotopes $Tc^{99}$
beta spectra, 6: 1048, 3867(J), 3867
electron emission spectra, low-energy, 6: 3872(J)
forbidden transitions in, 6: 3867(J)
internal conversion in, effect of chemical combination on, 6: 733, 2166(R)
isomeric transition in, effect of chemical combination on, 6: 734
nuclear magnetic moment, 6: 2748(J)
Technetium isotopes $Tc^{100}$
half life and β and γ emission, 6: 4987(J)
Technetium isotopes $Tc^{101}$
half lives, 6: 6531(R)
Technetium oxides
preparation, 6: 2000(J)
Technetium sulfides
preparation, 6: 1397(J)
Teeth
from Florida phosphate deposits, comparison with recent bones, 6: 784
radioautographic analysis for $P^{32}$ in, 6: 3504(J)
Telemetering systems
design, for upper atmosphere research, 6: 2972(R)
Television tubes
(See Cathode-ray tubes.)
Tellurium
electroplating, 6: 1304(R)
hyperfine structure and isotope shift in spectrum of, 6: 2542(J)
neutron resonance cross sections, 6: 1304(R)
neutron scattering cross sections, 6: 1304(R)
Tellurium chloride complexes
dimerization in HCl and ether solutions, 6: 6531(R)
Tellurium(IV) chlorides
isotopic exchange reactions with $Cl_2$, 6: 2596(R)
Tellurium complexes
with chlorine, 6: 5298(R)
solvent partition between HCl and dichlorodiethyl ether, 6: 4724(R)
Tellurium(VI) ions
polarographic reduction and determination in various media, 6: 5983
Tellurium isotopes
electrodeposition for neutron velocity spectrometer samples, 6: 2468(R)
half lives and γ energies in $Te^{121}$, $Te^{123}$, $Te^{125}$, $Te^{127}$, and $Te^{129}$, 6: 739(J)
mass, 6: 3054
Tellurium isotopes $Te^{121}$
isomeric magnetic dipole transitions in, 6: 335
Tellurium isotopes $Te^{123}$
half life of excited state of, 6: 2220(J)
isomeric magnetic dipole transitions in, 6: 335
isomers of, upper limit to half lives of, 6: 1555
neutron resonances in, 6: 2468(R)
nuclear magnetic moments, 6: 994(J), 2542(J)

Tellurium isotopes $Te^{124}$
energy levels of, properties, 6: 1914(J)
parity change in 0.60-Mev γ transition, 6: 3840(J)
spin and parity of first excited state, 6: 4209(J)
Tellurium isotopes $Te^{125}$
half life of excited state, 6: 2220(J)
isomeric magnetic dipole transitions in, 6: 335
isomeric transition in, and properties of energy levels of, 6: 2733(J)
isomers of, upper limit to half lives of, 6: 1555
neutron resonances in, 6: 2468(R)
nuclear magnetic moments, 6: 994(J), 2542(J)
Tellurium isotopes $Te^{127}$
preparation of carrier-free, 6: 1422
Tellurium isotopes $Te^{128}$
gamma cross sections, 6: 6531(R)
Tellurium isotopes $Te^{129}$
preparation of carrier-free, 6: 1422
Tellurium isotopes $Te^{130}$
double β decay of, theory, 6: 2784(J)
gamma cross sections, 6: 6531(R)
Tellurium isotopes $Te^{131}$
isomers of, yields, 6: 1424(R)
Tellurium isotopes $Te^{132}$
isomers of, decay schemes, 6: 5189(J)
Tellurium isotopes $Te^{139}$
internal conversion coefficients, 6: 6624(R)
Tellurium oxides
solubility in HCl and perchloric acid, 6: 6531(R)
Tellurium–selenium alloys
electrical conductivity of liquid, 6: 4077(J)
Temperature
(See also Thermometry.)
effects of cold on survival of irradiated rats, 6: 4372
effects on frequency of x-ray-induced chromosome aberrations, 6: 26
effects on radiosensitivity, 6: 44(J)
Temperature control
with resistance thermometer, circuit for, 6: 6020
Temperature recording devices
design and performance, 6: 1780
Tendons
effects of radiation on regeneration of, 6: 2563
Tennessee Univ.
progress reports on agricultural research, 6: 504(R), 2287(R), 3896(R), 5940(R)
progress reports on effect of wetting on heat-transfer characteristics of liquid metals, 6: 186(R), 2386(R), 4484(R), 6067(R)
progress reports on a high temperature calorimeter for solid state measurements, 6: 5136(R)
progress reports on nature of liquid flow within a spherical container, 6: 1441(R)
Tensile properties
(See also as subheading under specific materials.)
development of stress-strain-time phenomena in mechanical testing, 6: 5363
equipment for testing, 6: 3789
Teraphthalic acid, dimethyl ester
as filter material for air-borne dust, 6: 2908(J)
Terbium
atomic weight, 6: 3972(J)
preparation by reduction of chloride or fluoride with Ca in Ta container, 6: 3763
Terbium isotopes
alpha emission from, 6: 410, 1556
Terphenyl
alpha-induced scintillation in xylene solution, mechanism, 6: 4749(J)
internal absorption of fluorescent light in, in polystyrene, 6: 5647(J)
scintillation properties of solid solution in polystyrene, 6: 6422(J)
scintillation-response dependence on x-ray wave length, 6: 3637(J)
Terramycin
radiosensitivity effects, 6: 50
therapeutic uses in radiation sickness, 6: 3187
Testes
effects of radiation on cellular changes of, 6: 2560
effects of radiation on loss and recovery of weight of, as an index to radiation injury, 6: 2562
Testosterone
biosynthesis from acetate, 6: 173(J)
protective effect in uranyl nitrate kidney damage, 6: 3510(J)
Testosterone, 17 α-ethynyl-
synthesis of labeled, 6: 170(J)
Tetraneutrons
existence of, 6: 3045(J)
Thallium
absorption of $Co^{60}$ γ rays in, 6: 2203(J)
activiation of NaCl and KCl crystals by, theory of, 6: 2441(J)
determination by neutron activation, 6: 4730
diffusion in Sn, 6: 895
electrodeposition at Hg cathode, 6: 4411, 5311(R)
oxidation-reduction reactions in solution, mechanism, 6: 6529
polarographic behavior, 6: 3296
radiometric analysis, 6: 535
resistance hysteresis in superconductive transition of, 6: 2944
spectrophotometric determination, 6: 4724(R)
tissue distribution, 6: 2809, 3156
Thallium–bismuth–lead–tin alloys
preparation, 6: 4308(P)
Thallium chlorides
hyperfine structure of, by molecular-beam electric-resonance method, 6: 2735(J), 2736(J)
microwave absorption spectra at high temperatures, 6: 4674(J)
Thallium complexes
with 2-methyl-8-quinolinol, stability of, 6: 1141(J)
Thallium–indium alloys
magnetic properties of superconducting, 6: 2947
phase studies, 6: 1238(R), 3787(R)
phase transformation, effect of stress on, 6: 5781(R)
superconducting, magnetic properties of, 6: 5792(J)
Thallium isotopes $Tl^{201}$
formation, 6: 496(R)
Thallium isotopes $Tl^{202}$
formation, 6: 496(R)
Thallium isotopes $Tl^{203}$
half life of excited state, 6: 2220(J)
hyperfine structure anomaly in $^2P_{\frac{1}{2}}$ state of $Tl^{205}$ and, 6: 4929(J)
isomers of, upper limit to half lives of, 6: 1555
Thallium isotopes $Tl^{204}$
decay by β emission and K capture, 6: 5703(J)
decay by K capture, x radiation accompanying, 6: 5701(J)
decay schemes, scintillation spectrometer study, 6: 6189
energy levels, 6: 5657(R)
formation and handling, 6: 2890
half lives, 6: 1628
spectra, 6: 1304(R)
Thallium isotopes $Tl^{205}$
hyperfine structure anomaly in $^2P_{\frac{1}{2}}$ state of $Tl^{203}$ and, 6: 4929(J)
Thallium isotopes $Tl^{207}$
electron emission and lifetime of excited states, 6: 3721(J)
gamma emission, internal conversion, and spins of ground and excited states of, from $Bi^{211}$ α decay, 6: 2787(J)
nuclear energy levels, spins of, 6: 5520(J)
Thallium isotopes $Tl^{208}$
absolute determination of X-line of, by β spectroscopy, 6: 6655(J)
beta decay, accompanying internal conversion of $Pb^{208}$, 6: 4267(J)
conversion electrons, accompanying $Bi^{212}$ α decay, 6: 4267(J)
internal conversion lines, 6: 995(J)
Thallium nitrates
self-absorption and self-scattering of β particles by, 6: 1344
Thallium oxides
preparation, vapor pressure, and heat of sublimation, 6: 3746
Thenoyltrifluoracetone
(See Acetone, thenoyltrifluoro-)
Thermal analysis
(See Differential thermal analysis.)
Thermal conduction
(See also Heat transfer.)
mathematical analysis of, 6: 2069(J)
Mauro Picone theorem for, applications of, 6: 6585
measurement, 6: 2069(J)
solution of a differential equation in two- and three-dimensional problems, 6: 1714
Thermal conductivity
(See also as subheading under specific materials.)
measurement of, by ellipsoid envelope method, 6: 2918
measurement of, in liquid metals, 6: 1444(J)
measurement of, in liquids, 6: 5595
measurement of, in metals at high temperatures, 6: 2680
measurement of, in refractory materials, 6: 204
measurement of, in refractory materials, apparatus for, 6: 4074
Thermal convection
(See Convection.)
Thermal diffusion
(See also as subheading under specific materials.)
separation of binary mixtures by, 6: 5144(J)
Thermal insulation
geometric factors, 6: 3563(J)

Thermal neutrons
absorption cross section of $Li^7$ for extra-nuclear contribution to, 6: 1873(J)
capture by deuterons, 6: 2202(J)
density and velocity in GLEEP, 6: 2180(J)
density, diffusion, and diffusion lengths of, in heavy water, 6: 1831
detection and measurement, 6: 2810(R)
detection and measurement, instrument for, 6: 4330(P)
detection and measurement, ionization chamber for, 6: 5716(R)
detection and measurement in reactors, 6: 666(J)
detection and measurement with pulse-type radiation detection instrument, 6: 6119
detection and measurement with scintillation counter, 6: 5417(R)
detection by liquid scintillators containing B, 6: 1286
detection by proportional counters, 6: 1288
development of nuclear emulsion after exposure to intense flux of, 6: 6667(J)
diffraction by single crystals, 6: 721(J)
diffusion length in graphite, 6: 3844
effects on dormant barley seed, 6: 5262
energy measurements on, with crystal spectrometers, 6: 5427
fluctuation scattering in solids, theory, 6: 1830
flux measurements with metal foils, corrections for perturbation by foil, 6: 5178(J)
glass for absorption of, 6: 6470(J)
heating produced by absorption of $\gamma$ rays emitted in capture of, 6: 4965
magnetic scattering by ferromagnetic crystals, 6: 2211(J)
multiple small-angle scattering of, theory, 6: 2516(J)
scattering and absorption by crystalline matter, 6: 3863(J)
scattering by many-body systems in terms of two-body collision parameters, 6: 5222(J)
scattering in liquids, 6: 726(J)
survey methods for, 6: 5161(J)
Thermal nuclear reactions
initiation by collision of shock waves, 6: 4957(J)
relation to oscillations and explosions of stars, 6: 6080(J)
Thermal precipitators
(See also Particles.)
oscillating, design, 6: 3774
Thermal properties
of non-metallic materials, furnace for measurement at high temperatures, 6: 3581(R)
Thermal radiation
(See also Heat transfer.)
effects on Fe concentration in blood serum, liver, spleen, and kidneys, 6: 4363(J)
effects on skin, type of injury and relation to energy delivery rate, 6: 4350
exposure time-dose relationship for skin burns, 6: 4349
protective effects of fabrics against, 6: 3185(J)
Thermal reactors
(See also specific thermal reactors.)
design of, lecture on, 6: 1323
Thermal stresses
in composite medium, method for calculation, 6: 4042
theory of transient, 6: 4086
Thermionic emission
(See subheading emission under Electrons.)
Thermocouples
(See also Pyrometers; Thermometers.)
calibration of Mo-W, 6: 1259(J)
calibration of Mo-W, Ta-W, and Nb-W, 6: 276
development for operation at 1600 to 2000°C, 6: 1498
manuals on, 6: 627
as neutron-density detectors, 6: 1583(P)
nomographs, 6: 1713
performance of bare-wire, in air streams, 6: 1713
performance of Fe-Hg and Cu-Hg couples, 6: 5090(R)
performance of Pt/Pt–Rh, 6: 1226
thermoelectric potential of Hg-Fe, 6: 579
Thermodynamics
(See also subheading thermodynamic properties under specific materials; see also Physics.)
tables of heats, free energies, and entropies in liquid ammonia, 6: 809
of wave fields, 6: 3728(J)
Thermometers
(See also Bolometers; Pyrometers; Thermocouples.)
based on Johnson noise, design, 6: 3338(R)
calibration of, for low temperature measurements, 6: 1484
high-temperature, design, 6: 4114
for low temperatures, performance of, 6: 2697(J)
noise, design of, 6: 5830(R)
for range 2 to 20°K, 6: 1280(J)
Thermometry
6: 960(R)
bibliographies and manuals on, 6: 627
Thermopiles
neutron-sensitive, design, 6: 6117
Thianaphthene
fluorination with $CoF_3$, 6: 2031(J)
Thiazoleethanol, 2-amino-4-methyl-
synthesis of $C^{14}$-labeled, 6: 4022(J)
Thickness gages
based on $\gamma$-ray transmission, design, 6: 191
beta radiation, technique, 6: 5093(J)
design, 6: 3818(R), 5830(R)
design and performance, 6: 937
for measuring metal coatings, design, 6: 3338(R)
Thiocyanate complexes
spectrophotometric analysis, 6: 539
with zinc, polarographic study, 6: 5311(R)
Thiocyanates
exchange reactions with sulfide and cyanide ions, 6: 87
Thiols
in flotation of sphalerite, 6: 3294(R)
Thiophene
fluorination, 6: 3985(J)
Thiophosphoryl fluoride
microwave spectra and structure of, 6: 1165
Thiourea complexes
(See Urea, thio- complexes.)
Thoracic viscera
blood plasma volume in, measurement, 6: 5253
Thorium
amperometric determination, 6: 2872
analytic reagents for, 6: 2015(J), 2019(J)
chromatographic determination, 6: 2875(J)
chromatographic determination in minerals and ores, 6: 5072(J)
colorimetric determination in low-grade minerals, 6: 1401, 5571
conductometric determination in presence of rare earths, 6: 5316
decay schemes, 6: 444(R)
determination and separation from U, 6: 1148(J)
determination and separation with cinnamic acid, 6: 5052(J)
determination and separation with vanillic acid, 6: 5053(J)
determination from $\alpha$ ranges in nuclear emulsions, 6: 2160(J)
determination in ores, 6: 6304
determination in ores by photographic film detectors, 6: 3366(J)
determination in rocks, nuclear emulsion technique for, 6: 5148(J)
elastic constants measured by ultrasonic pulse technique, 6: 2103
furnacing and casting, 6: 2384(J)
gamma spectra, 6: 446(R)
gravimetric determination and separation from rare earths with ammonium furoate and Na sulfanilate, 6: 5995(J)
gravimetric determination in Mg alloys, 6: 6543(J)
gravimetric determination with benzoic acid, 6: 2017(J)
Hall coefficient and electron mobility, 6: 4804(R)
Hall coefficient at room temperature, 6: 5396(R)
heat of combustion, 6: 2061
heat production by, in earth, 6: 6361(J)
ion-exchange separation from La, 6: 3256(J)
ion-exchange separation from Ti and Zr, 6: 2343(J)
ion exchange with U in uranyl nitrate, 6: 76
neutron cross sections, 6: 5657(R)
neutron emission in spontaneous fission of, 6: 1851(J)
neutron scattering cross sections of, at 1.44 ev, 6: 3674
pair-production and Compton scattering in, 6: 4967(J)
photofission, angular distribution of fragments, 6: 5486(R)
physical properties, bibliography, 6: 5787(J)
proportion of, in earth's radioactivity, 6: 6360(J)
radiometric determination, activity curves of Th series and $\beta$ surface dose rates, 6: 5920(J)
radiometric determination in allanite, 6: 4066(J)
radiometric determination in monazite, tracer study, 6: 5989
separation from cerous oxalate, monazite, and U, 6: 3524(J)
separation from monazite, 6: 5069(J)
separation from monazite with $NH_3$, 6: 3544(J)
separation from rare earths, 6: 5989
separation from rare earths with anisic acid, 6: 1147(J)
separation from rare earths with camphoric acid, 6: 1150(J)
slow neutron transmission, 6: 984
spectrographic determination of micro quantities, 6: 5073(J)
spectrophotometric analysis for Al, 6: 5981
spectrophotometric determination in monazite sands, 6: 5738
spectrophotometric determination of microgram amounts in $H_2O$, 6: 6546(J)
thermal conductivity and diffusivity, 6: 5396(R)

Thorium (cont'd)
thermal conductivity measurement at high temperatures, 6: 2680
toxicology, 6: 526(R)
transport and elimination of intravenously administered, role of macrophage movements in, 6: 2839(J)
vacuum fusion analysis for $O_2$, $N_2$, and $H_2$, 6: 3254(J)
Thorium alloys
constitution diagrams, 6: 5787(J)
Thorium–aluminum alloys
metallography of, with polarized light, 6: 1228
Thorium–cerium–magnesium alloys
creep resistance and tensile properties, 6: 2097(J)
Thorium chelates
infrared and Raman spectra of, with 2,4-pentanedione, 6: 2882(J)
Thorium chloride complexes
in aqueous solution, ionization, 6: 1625
Thorium complexes
with chloride and thenoyltrifluoroacetone in water, ionization of, 6: 1625
with chloride, fluoride, nitrate, phosphate, and sulfate, 6: 1130(J)
with (ethylenediamine)tetraacetic acid and nitrilotriacetic acid, properties, 6: 3771
Thorium compounds
physical properties, bibliography, 6: 5787(J)
toxicology of inhaled, 6: 528
Thorium deposits (Colo.)
in radioactive tertiary porphyries in Central City district, 6: 6356
Thorium fluorides
magnetic properties of solutions of, with $UF_4$, 6: 857(J), 4039(J)
Thorium(III) fluorides
preparation by reduction of Th(IV) fluoride by Th metal, 6: 2900(J)
Thorium(IV) fluorides
reduction by Th in preparation of Th(III) fluoride, 6: 2900(J)
Thorium hydrides
explosive limits, 6: 1627
Thorium isotopes
(Isotopes identified as ThA, ThX, etc., have been listed as in the table below.)
MsTh$_1$ Radium isotopes $Ra^{228}$
RdTh Thorium isotopes $Th^{228}$
ThB Lead isotopes $Pb^{212}$
ThC Bismuth isotopes $Bi^{212}$
ThC'' Thallium isotopes $Tl^{208}$
ThX Radium isotopes $Ra^{224}$
decay schemes, 6: 1907
Thorium isotopes $Th^{228}$
conversion-electron emission, 6: 5700(J)
decay schemes, 6: 3106
excited states, spins, 6: 5194(J)
Thorium isotopes $Th^{229}$
excited states, 6: 6193(J)
Thorium isotopes $Th^{230}$
excited states, spins, 6: 5194(J)
Thorium isotopes $Th^{231}$
decay scheme, 6: 6710
Thorium isotopes $Th^{232}$
internal conversion, 6: 4991(J)
mass, 6: 3061(J)
Thorium isotopes $Th^{234}$
adsorption by aquadag-coated dipping G-M tube, 6: 2893(J)
separation from $Pa^{234}$ by ion exchange, 6: 437(J)
tracer techniques, in determination of Th in monazite, 6: 5989
Thorium–magnesium alloys
creep resistance, tensile properties, and thermal conductivity, 6: 2097(J)
Thorium–magnesium–zirconium alloys
metallurgical properties, 6: 903(R)
Thorium minerals
age determination of, method for, 6: 3283(J)
analysis by comparison of absorption coefficients, 6: 3966(J)
bibliography, 6: 5780(J)
determination of Th/U ratio in, by x-ray emission spectrography, 6: 4778(J)
metamict state of, studies in, 6: 3571(J)
Thorium nitrate–water systems
phase studies at 20 to 160°C, 6: 82
Thorium nitrates
free acidity in solutions of, estimation, 6: 3522
as reagent for amperometric titration of fluoride, 6: 3990
solubility in hexanol and octanone, effects of impurities on, 6: 83
Thorium nitrides
identification by electron-diffraction patterns, 6: 4804(R)
preparation, melting point, and crystal structure, 6: 3586(J)
Thorium ores
(See also Monazite.)
Thorium ores (cont'd)
bibliographies on, 6: 212
radioautographic analysis, 6: 1809(J)
radiometric analysis, activity curves of Th series and $\beta$ surface dose rates, 6: 5920(J)
radiometric analysis using nuclear emulsion techniques, 6: 3967(J)
Thorium oxide–cerium oxide systems
reduction by $H_2$, 6: 1683(J)
Thorium oxide–uranium oxide systems
lattice constants and magnetic susceptibility, 6: 5247
semiconductive properties, 6: 2062(J)
Thorium oxides
cryoscopy in cryolite-NaF eutectic, 6: 3221(J)
electrolysis at high temperatures, 6: 4087(J)
heat of formation, 6: 2061
metabolism in individual liver cells, nuclear emulsion studies, 6: 5040(J)
pathological effects, 6: 3492(J)
precipitation from homogeneous solutions, 6: 2602(J)
preparation, dissolution, precipitants, and radiation effects, bibliography on, 6: 5297
thermal conductivity up to 1300°C, 6: 1448(R)
Thorium(IV) oxides
granulomatosis induced by thorotrast, clinical studies, 6: 3907(J)
Thorium powders
explosive limits, 6: 1627
Thorium–selenium alloys
metallography of, with polarized light, 6: 1228
phase studies and crystal structure, 6: 5574(J)
Threonine
ion exchange separation from allothreonine, 6: 4029(J)
synthesis of $N^{15}$- and $C^{14}$-labeled, 6: 4029(J)
Thrombin
effects of toluidine blue on coagulation of fibrinogen by, 6: 6492
Thulium
atomic weight, 6: 3972(J)
preparation by reduction of chloride or fluoride with Ca in Ta container, 6: 3763
tissue distribution, 6: 3156
x-ray absorption edges, 6: 6010(J)
Thulium compounds
ferrates(III), with two ferromagnetic Curie points, 6: 5582(J)
Thulium isotopes $Tm^{170}$
beta spectrum, 6: 2791(J), 3667(J)
forbidden transitions in, 6: 3667(J)
low-energy $\gamma$ transitions in, 6: 2522
spectrum of, Fermi analysis, 6: 1356(J)
Thymonucleic acids
radiosensitivity effects during radiotherapy, 6: 5016(J)
Thymus
effects of $\gamma$ radiation on metabolic processes in rat, 6: 6264(J)
effects of peripheral shielding on radiation injury of, 6: 5941(J)
radiosensitivity of, effects of cysteine on, 6: 3487
Thyroid diseases
diagnosis, evaluation of $I^{131}$ tracer tests in, 6: 2848(J)
diagnosis and therapy with $I^{131}$, 6: 3190(J), 3925(J)
diagnosis and treatment of thyroid cancer with $I^{131}$, 6: 5961(J)
effects of drugs during radioiodine treatment, 6: 6286(J)
metabolism of $I^{131}$ in patients with hyperthyroidism, 6: 3929(J)
plasma $I^{131}$ index for assessing thyroid activity in, 6: 3946(J)
radioiodine test of thyroid function in, correlation with B.M.R., 6: 2853(J)
therapy of hyperthyroidism with $I^{131}$, 6: 4712
therapy of hyperthyroidism with $I^{131}$, review of clinical results, 6: 3932(J)
therapy with $I^{131}$, 6: 67(J), 68(J), 1976(J), 2278(J), 3933(J)
therapy with $I^{131}$, case history, 6: 3509(J)
thyroidal and renal plasma $I^{131}$ clearance rates in, routine determination of, 6: 2845(J)
Thyroid gland
castration effects on radiation-induced activity, 6: 5012(J)
destruction by radiation from $I^{131}$, physiological and behavior changes following, 6: 2257(J)
effects of adrenaline on, 6: 1075
effects of F on, 6: 6319(J)
effects of radiation on, 6: 5716(R)
effects of radiation on activity of, 6: 31, 5014(J)
effects of radiation thyroidectomy on induction of pituitary tumors in the mouse, 6: 6249(J)
effects of removal on hematopoietic regeneration in whole-body irradiated rats, 6: 5013(J)
effects of x rays on function of, in rats, 6: 2258(J)
function in sheep, effects of daily doses of $I^{131}$, 6: 5276(J)

Thyroid gland (cont'd)
histological and pathological effects of $I^{131}$ on, 6: 1604(J)
iodine uptake by fetal human, 6: 2830(J)
metabolism in, tracer study, 6: 5972(J)
physiological effects of radiothyroidectomy on pituitary gland, 6: 5938
radioautographic analysis of, using At and I, 6: 496(R)
radioiodine fixation in, apparatus for measurement of, 6: 3644(J)
removal of one lobe of, effects on I tissue distribution, 6: 2276(J)
scintograms of, method for speeding up and improving, 6: 3628
tumors of, evaluation of $I^{131}$ therapy in, 6: 5288(J)
Thyronine
effects on ascorbic acid oxidation, 6: 80
Thyronine, 3,5-diiodo-
effects on ascorbic acid oxidation, 6: 80
Thyroxine
effects on ascorbic acid oxidation, 6: 80, 803
metabolism by the liver, tracer study with $I^{131}$, 6: 6294
nature and biosynthesis of, tracer study, 6: 5972(J)
preparation of $C^{14}$-labeled, 6: 4468(J)
radiometric determination by $I^{131}$ exchange, 6: 3971(J)
Thyroxine, sodium derivatives
effects on ascorbic acid oxidation, 6: 80
Time measurement
(See also specific instrument used, i.e., Oscillographs; Pulse generators, etc.)
equipment for, 6: 479(P)
pulse-height analyzer for, 6: 4129(J)
Timing circuits
for controlling high-energy pulses, 6: 6107(J)
microsecond, design, 6: 3343(J)
millisecond, design, 6: 3341
for production of square 0.2- to 10-μsec pulses, 6: 5139(J)
for selection of last pulse in series, 6: 4856(J)
for tenths of seconds, design, 6: 4854(J)
Tin
absorption of photons of cosmic radiation in, 6: 258(J)
absorption spectra in HCl, 6: 4735(J)
capture of $\mu^-$ mesons in, 6: 4166(J)
chlorination and distillation separation from oxide mixtures containing Nb and Ta, 6: 2608(J)
colorimetric determination, 6: 1137
corrosion, marine, 6: 5100(J)
corrosion by $H_2O_2$, 6: 240(J)
deuteron range-energy relation in, 6: 1032(J)
dynamic coefficients, 6: 245(J)
electric conductivity and volume changes on fusion, 6: 5394(J)
electric properties of, in superconducting state, 6: 920(J), 2952(J)
electrolytic separation and determination, 6: 1138(J)
electrons of, coherent scattering of γ rays by, 6: 5693(J)
gamma absorption in, 6: 1533, 5456(R)
gamma scattering, 6: 5899(J)
isotope effect in superconductivity of, 6: 3617(J)
$\pi^-$-meson total cross sections, 6: 2730(J)
oxidation-reduction reactions in solution, mechanism, 6: 6529
proton elastic scattering cross sections, 6: 5692(J), 6179
resistance hysteresis in superconductive transition of, 6: 2944
superconducting-normal transition in, 6: 6373
superconducting-normal transition of, in increasing and decreasing magnetic fields, 6: 2671(J)
volumetric determination in Ti and Ti alloys, 6: 3529(R)
x-ray spectra, 6: 97(J)
Tin (liquid)
corrosion of refractory materials by, 6: 6351
crystalline nucleus formation in supercooled, 6: 4517(J)
Tin–bismuth–gallium–lead alloys
preparation, 6: 4309(P)
Tin–bismuth–lead–thallium alloys
preparation, 6: 4308(P)
Tin chlorides
reactivity of $Br^{80}$ with, effect of isomeric transition on, 6: 5752(J)
Tin–copper alloys
phase studies, 6: 600(R), 1238(R), 3787(R)
Tin crystals
creep of, grain boundaries in, 6: 2022
Tin isotopes
decay schemes, 6: 3056(J)
enrichment by Szilard-Chalmers reactions, 6: 2049(J)
production by α bombardment of Cd isotopes, 6: 3056(J)
superconductivity of, measurement, 6: 1748
Tin isotopes $Sn^{113}$
decay schemes, 6: 739(J), 3619(J)
Tin isotopes $Sn^{117}$
energy levels and half lives, 6: 739(J)
Tin isotopes $Sn^{117}$ (cont'd)
isomeric magnetic dipole transitions in, 6: 335
mass, 6: 3055
Tin isotopes $Sn^{118}$
neutron activation cross section, 6: 1052(J)
Tin isotopes $Sn^{119}$
gamma emission and conversion electrons from, 6: 1052(J)
isomeric magnetic dipole transitions in, 6: 335
Tin isotopes $Sn^{120}$
mass, 6: 3055
Tin isotopes $Sn^{123}$
decay schemes, 6: 739(J)
yield and half lives of, from $U^{233}$ and $U^{235}$ fission, 6: 1857
Tin isotopes $Sn^{124}$
binding energy of, calculation, 6: 333(J)
double β decay of, 6: 5913
double β decay of, half life for, 6: 2524, 4989(J)
double β decay of, theory of angular correlation of electrons in, 6: 2784(J)
double β decay or successive β emissions from, half lives for, 6: 2535(J)
Tin–lead alloys
dynamic coefficients, 6: 245(J)
liquid-solid equilibrium diagram and energies of mixing, 6: 4516(J)
Tin oxide compacts
thermal and mechanical properties of, with 1% ZnO, 6: 884
Tin oxides
colorimetric analysis, 6: 1137
precipitation from homogeneous solutions, 6: 2602(J)
Tin single crystals
growth from melt, effect of thermal factors on, 6: 5786(J)
magnetic properties, isotopic shift in, 6: 6375
Tin–zirconium alloys
constitution diagrams, 6: 591(R), 4505(R)
corrosion, 6: 2921(R)
solid-solubility in, determined by strain-aging technique, 6: 5375
Tissue culture
photography as an aid in observation of changes in, 6: 797(J)
Tissue homogenates
radiosensitivity effects, 6: 520(R)
of spleen, effects on carbohydrate metabolism, 6: 5550(R)
in therapy of radiation injuries in amoeba, 6: 5550(R)
Tissues
(See also the specific tissues.)
analysis for As by radioactivation, 6: 3756
cultures, radiation effects on, 6: 4689(R)
cytologic and histochemical studies of radiation effects on frozen-dried dry-mounted animal, 6: 2252
distribution of Ca and Sr in, 6: 2287(R)
dosage determination of fast neutrons and gamma radiation in standard, 6: 1508
effects of radiation on, 6: 34
effects of radiation on, with special reference to differentiation, 6: 1973(J)
effects of radiation on growth and steady states of, 6: 4693(R)
effects of a small intestinal microsomal fraction on growth of transplanted lymphosarcoma, 6: 5931
effects of x radiation on, 6: 4362(J)
extraction and spectrophotometric analysis of prodigiosine from, 6: 2805
gamma absorption, comparison with air, 6: 5270(J)
infrared spectra, 6: 3735
ionization at various depths, 6: 404(J)
mashes and extracts from, in therapy of radiation injuries, 6: 6270(R)
neutron flux distribution in, 6: 5426
preparation for electron microscopy, 6: 2560
preparation for radioautography and radiography of combined calcified and soft, 6: 3188
preparation of sections for microscopic examination by freeze drying before embedding, structural alterations produced by, 6: 5928
preparation of ultra-thin sections for electron microscopy, 6: 5534
radiation dosage determinations in, 6: 5716(R)
radioautography, evaluation of freeze-drying and dry-cutting techniques for preparation, 6: 5282
radioautography, method for, 6: 5293(J)
radiometric analysis, 6: 512(J)
radiometric analysis, sample preparation for, 6: 965(J), 968(J)
radiometric analysis by dissolving in scintillating liquids, 6: 294
radiosensitivity, effects of acetal phosphatides on, 6: 6506(J)
radiosensitivity in developing fetuses, 6: 6494
removal of embedding material from, for electron microscopy, 6: 4700(R)
respiration, 6: 792

Tissues (cont'd)
respiration, effects of 2,4-dinitrophenol on, 6: 2285
spectrographic analysis, sample preparation for, 6: 6512(R)
sterilization by radiations, 6: 2253(R)
therapeutic use of splenic, in radiation injuries, 6: 4709
x-ray absorption, by exit-dose measurement, 6: 5269(J)
Titanates
organic, association in benzene solution, 6: 1129(J)
Titanium
analysis for Al, Co, Cu, Mo, Ni, Nb, Ta, W, and Zr, 6: 3523(R)
atomic radii, 6: 5607
brazing, methods and equipment for, 6: 5383(R)
cathodic sputtering, 6: 252
chemical analysis for Al, Nb, Ta, and W, 6: 5740
chemical properties, occurrence, and preparation, 6: 2004(J)
chemical separation from Nb and Ta in HCl, 6: 2344(J)
chlorination and distillation separation from oxide mixtures containing Nb and Ta, 6: 2608(J)
coated with Si, Al-Si, or Ni-Si, oxidation resistance of, 6: 5608(R)
coating by chemical and electrochemical methods, 6: 4067
coating with Mo by vapor deposition, 6: 4787
coatings for, 6: 604(R)
colorimetric analysis for Mo and W, 6: 2312(J)
combustion analysis for carbon, 6: 592
compression texture of iodide, 6: 3795(J)
copper coatings on, electrodeposition of, 6: 2926
corrosion, 6: 2920(R), 2921(R), 4777(R)
corrosion by HCl and $H_2SO_4$, 6: 588
corrosion by $H_3PO_4$ aerated with He and by Ca and Na hypochlorite, 6: 1236
corrosion resistance in aqueous inorganic chlorides, 6: 6048(J)
corrosion resistance in mineral acids, 6: 6049(J)
crystal structure of, effect of heat-treatment and additions of $O_2$, C, and $N_2$ on, 6: 238(J)
effects of H on mechanical and physical properties, 6: 4789
effects of microstructure on mechanical properties, 6: 4791
effects of oxygen on crystal structure, mechanical properties, and working, 6: 1247(J)
effects of range of stress and prestrain on fatigue properties, 6: 4072
elastic constants of, measured by ultrasonic-pulse technique, 6: 2103
electrochemical corrosion, 6: 597(R), 4777(R)
electrolysis, 6: 597(R)
electrolytic preparation, 6: 1691(J)
electroplating, 6: 604(R)
fabrication and machining, 6: 906(J)
fabrication of hollow cones of, 6: 2383(J)
fine line markings in, identification, 6: 4790
furnacing and casting, 6: 2384(J)
galling and seizing characteristics, 6: 4793(R)
grain refinement by addition of, to Al alloy castings, 6: 1253(J)
grinding, 6: 910(J)
hardening by nitridation, 6: 5565
infrared spectra of, calculations, 6: 161(J)
ion-exchange separation from Zr and Th, 6: 2343(J)
machining, tools and methods for, 6: 2940(J)
mechanical properties, 6: 2933(R)
metallography of, with polarized light, 6: 1228
metallurgy symposium, properties and possible uses of, 6: 237
neutron transmission cross sections, 6: 2479(J)
nuclear magnetic resonance, 6: 2747(J)
oxidation, cubic law of, 6: 1462
oxidation, logarithmic growth law for, 6: 805
oxidation in air at high temperature, role of N in, 6: 4799(J)
plastic deformation and directional properties, 6: 6550
polarization in NaCl solutions, 6: 5301
polarization potential, 6: 3959(R)
preparation by hot-wire decomposition process, kinetics, 6: 5112(J)
preparation, melting point, and crystal structure, 6: 3566(J)
production, review of methods for, 6: 913(J)
production by melting sponge metal, 6: 2935(J)
production, fabrication, and metallurgical properties, 6: 5387
properties affecting alloying, 6: 6057
recovery from a Ti phosphorus oxychloride complex, 6: 4305(P)
scaling at high temperatures, 6: 3577(J)
soldering, methods and equipment for, 6: 5363(R)
specific heat between 1.8 and 4.2°K, 6: 5620(J)
spectrochemical analysis of, excitation and analytical methods for, 6: 2637(R)
spectrophotometric analysis with thymol, 6: 1149(J)
spectrophotometric determination of traces in Zr using tiron, 6: 1656
strain sensitivity of wire, 6: 6369(J)
superconducting properties below 1°K, 6: 6371
surface hardening by addition of metalloid elements, 6: 3291(R)
Titanium (cont'd)
surface hardening by carburization and induction heat-treatment, 6: 4506
surface treatment, conference at Watertown Arsenal, May 20, 1952 on, 6: 5385
$TiSi_2$ coatings for, preparation and oxidation resistance of, 6: 2662(R)
transformation $\alpha \rightleftharpoons \beta$ in, effect of Cr, Co, Mn, Ni, and V on, 6: 3224(J)
vacuum fusion analysis for N and O, 6: 5603
vacuum fusion analysis for $O_2$, $N_2$, and $H_2$, 6: 3254(J)
vapor pressure between 1587 and 1764°K, 6: 5567
volatilization rate in He d-c arc spectroscopy, 6: 2607(J)
volumetric determination in Ti metal, 6: 6545(J)
welding methods, 6: 4509(J), 4512(J)
Titanium alcoholates
preparation and boiling points, 6: 5080(J)
Titanium alloys
analysis for Al, Co, Cu, Mo, Ni, Nb, Ta, W, and Zr, 6: 3523(R)
brazing, methods and equipment for, 6: 5383(R)
chemical analysis for Al, Nb, Ta, and W, 6: 5740
coating with Mo by vapor deposition, 6: 4787
constitution and phase transformations, 6: 6057
corrosion, 6: 2920(R), 2921(R)
effects of range of stress and prestrain on fatigue properties, 6: 4072
galling and seizing characteristics, 6: 4793(R)
grinding, 6: 910(J)
hardening by nitridation, 6: 5565
machining, 6: 2381(J)
martensite transformation temperatures for, with Nb, Ta, W, Fe, Cr, or Mn, 6: 4784
metallurgical properties and effects of impurities on, 6: 5387
metallurgy symposium, properties and possible uses of, 6: 237
phase studies, 6: 3224(J)
preparation, fabrication and evaluation of engineering properties of, 6: 3289(R)
protective coating for, 6: 4076(R)
soldering, methods and equipment for, 6: 5383(R)
spectrochemical analysis of, excitation and analytical methods for, 6: 2637(R)
surface hardening by addition of metalloid elements, 6: 3291(R)
welding, 6: 4512(J)
welding of $\beta$-stabilized, 6: 4071
Titanium–aluminum alloys
constitution diagram, 6: 3796(J), 4788(R)
constitution diagrams and microstructure of, 6: 908(J)
crystal structure of, from x-ray-diffraction data, 6: 1243(J)
phase studies, 6: 5384(R)
preparation from $TiO_2$ and Al powder, 6: 607(J)
Titanium–aluminum–chromium alloys
mechanical properties and transformation temperatures, 6: 5606(R)
preparation and constitution diagrams, 6: 4780(R)
Titanium–aluminum–manganese alloys
arc melting, weight lose during, 6: 5384(R)
constitution diagrams, 6: 4792(R), 5384(R)
phase studies, 6: 5384(R)
Titanium–aluminum–molybdenum alloys
mechanical properties and transformation temperatures, 6: 5606(R)
preparation by melting and forging, 6: 4788(R)
Titanium borides
crystal structure and properties, 6: 120
preparation and physical properties, 6: 4408(J)
Titanium carbide cermets
high-temperature properties of, containing Ni or Fe, 6: 2656
oxidation resistance, 6: 6353(J)
Titanium carbide–tantalum carbide–tungsten carbide systems
phase studies, 6: 1126(J)
Titanium carbide–vanadium carbide–zirconium carbide systems
solubility relationships in, 6: 2074
Titanium carbides
high-temperature reactions with metals, 6: 1216(J)
preparation, melting point, and crystal structure, 6: 3566(J)
pressure-sintered, physical properties of, 6: 2936(J)
reactions with boron carbide above 1920°, 6: 208(J)
Titanium–carbon–chromium systems
phase studies, 6: 6061
Titanium–carbon–manganese systems
phase studies, 6: 6061
Titanium–carbon systems
constitution diagrams, 6: 5607
Titanium–carbon–tantalum systems
constitution diagrams and lattice constants, 6: 5607
Titanium–chromium alloys
constitution diagrams, 6: 5113(J)
phase studies, 6: 5384(R), 5603

Titanium–chromium alloys (cont'd)
preparation and properties, 6: 2094(J)
Titanium–chromium–iron alloys
isothermal transformation characteristics, 6: 2937(J)
Titanium–chromium–molybdenum alloys
constitution diagrams, 6: 4792(R), 5394(R)
heat-treatment, 6: 5384(R)
phase studies, 6: 5384(R)
Titanium–chromium–nitrogen systems
phase studies, 6: 6062(R)
Titanium complexes
with fluoride and $H_2O_2$ in acid solution, 6: 3226(J)
with hydrogen peroxide, 6: 3225(J)
recovery of Ti from, 6: 4305(P)
Titanium compounds
molecular electric moments, 6: 1128(J)
Titanium conferences
on surface treatment, at Watertown Arsenal, May 20, 1952, 6: 5385
Titanium–copper alloys
constitution diagrams, 6: 4515(J)
phase studies, 6: 5603
Titanium couples
corrosion by synthetic ocean water aerated with He, 6: 1236
Titanium crystals
preparation, 6: 6550
Titanium–gold compounds (intermetallic)
crystal structure, 6: 3975(J)
Titanium hydrides
explosive limits, 6: 1627
formation, 6: 2004(J)
identification as cause of fine line markings in Ti, 6: 4790
Titanium–hydrogen systems
phase studies, 6: 4789
Titanium–iron alloys
constitution diagrams, 6: 5604
hardness numbers and heat-treatment, 6: 5604
melting of, weight changes in, 6: 5604
microstructure of melted, annealed and homogenized, 6: 5604
oxidation in air at high temperature, role of N in, 6: 4799(J)
preparation, metallography, and constitution diagrams, 6: 3208
surface tension of, 6: 1449(R)
Titanium isotopes
ion-exchange separation, 6: 4014
ion-exchange separation from Zr and Th and from each other, 6: 2343(J)
relative abundances, mass-spectrographic determination of, 6: 2526
Titanium isotopes $Ti^{47}$
nuclear magnetic moment, 6: 1850(J)
Titanium isotopes $Ti^{48}$
mass, 6: 3055
Titanium isotopes $Ti^{49}$
nuclear magnetic moment, 6: 1850(J), 2747(J)
Titanium isotopes $Ti^{50}$
mass, 6: 5188(J)
Titanium–lead couples
corrosion by synthetic ocean water, 6: 1236
Titanium–manganese alloys
effect of microstructure on mechanical properties, 6: 5783(R)
phase studies, 6: 1732, 5384(R)
quench hardening, literature survey to evaluate nature of, 6: 5609
Titanium–manganese–molybdenum alloys
analysis, 6: 5384(R)
constitution diagrams, 6: 4792(R)
Titanium–manganese–nitrogen systems
phase studies, 6: 6062(R)
Titanium–molybdenum alloys
phase studies, 6: 5384(R)
time-temperature-transformation characteristics, 6: 2100(J)
Titanium–nickel alloys
annealing, 6: 4073
determination of phase diagram, with sponge Ti and Ni, 6: 4073
preparation and polishing, 6: 4073
Titanium nitride cermets
grinding, oxidation, porosity, and modulus of rupture, 6: 6352(R)
Titanium nitrides
oxidation, time rate at 1000°C, 6: 6352(R)
preparation, melting point, and crystal structure, 6: 3566(J)
Titanium oxide–aluminum oxide–beryllium oxide systems
constitution diagrams, ceramic properties, and physical properties, 6: 4775(J)
Titanium oxide–aluminum oxide systems
constitution diagrams, ceramic properties, and physical properties, 6: 4775(J)
Titanium oxide–beryllium oxide systems
constitution diagrams, ceramic properties, and physical properties, 6: 4775(J)
Titanium oxides
dielectric properties of, measured by electromagnetic resonators, 6: 1493
electric and thermoelectric properties of partially reduced, 6: 206(J)
lattice parameters of α and TiO phases of Ti-O systems, 6: 6069(J)
preparation, 6: 2004(J)
production by chloride decomposition, 6: 1944(P)
thermal conductivity of, measurement by ellipsoid envelope method, 6: 2918
x-ray-diffraction analysis, 6: 3810(J)
Titanium(III) oxides
adsorption of A on, 6: 154(J)
Titanium(IV) oxides
ceramic containing, properties of, 6: 886(P)
electric conductivity in polycrystalline annealed, 6: 1214
high-voltage polarization in polycrystalline annealed, 6: 1215(J)
ionization, 6: 541(J)
reduction by Al powder, 6: 607(J)
Titanium–platinum alloys (intermetallic)
crystal structure, 6: 3975(J)
Titanium powders
explosive limits, 6: 1627
Titanium silicides
preparation, properties, and powder metallurgy of, 6: 2662(R)
Titanium sulfides
thermodynamic properties, 6: 2009(J)
Titanium–tantalum alloys
constitution diagrams, 6: 5607
phase studies, 6: 1732
Titanium–tungsten alloys
phase studies, 6: 1732
Titanium–uranium alloys
phase studies, 6: 5105
Titanium–vanadium alloys
constitution diagrams, 6: 3794(J)
Titanium–zirconium alloys
constitution diagrams, 6: 1229
corrosion, 6: 2921(R)
corrosion by Al chlorides, Na and Ni, 6: 1236
phase studies, 6: 233
properties, 6: 1229
Titration equipment
automatic, using electrolytically generated titrants, 6: 2619
modified Fischer titration cell, 6: 5337
thermometric, operation, 6: 5311(R)
Toluene
ionization potential of, by mass spectrography, 6: 291(J)
reactions with activated Br, 6: 2883(J)
p-Toluenesulfonic acid, butyl ester
molecular rearrangement in solvolysis of $C^{14}$-labeled, 6: 4471
Toluidine blue
antispasmodic effects on ileum and uterus, 6: 4343
effect on coagulation of fibrinogen by thrombin, 6: 6492
Tomography
(See also Radiography.)
thickness of layers taken in, calculation of, 6: 1099(J)
Topology
convex bodies, symmetrization of, 6: 949
convex regions associated in subspaces, 6: 948
convex sets in abstract linear space, 6: 4568, 4570
convex sets and additive set functions, 6: 950
convex sets with linear closure, 6: 4569
Torbernite
occurrence in Clear Creek County, Colorado, 6: 214
Torbernite deposits
exploration of, for U in Grant Co., New Mexico, 6: 1457
in Missouri fire clay, 6: 1728(J)
Torpedo Experimental Establishment, Greenock (Great Britain)
progress reports, 6: 859(R)
Towne Scientific School, Univ. of Penna.
progress reports, 6: 229(R), 1658(R), 3748(R)
Tracer techniques
(See also isotopes and labeled compounds used; also phenomena studied by tracer techniques; see also Radioisotopes.)
application to organic reaction mechanism problems, review 6: 3770(J)
distribution studies between melts and solid phases using, 6: 2857
isotope availability, radioactivity determination, and compound synthesis, 6: 6340

Tracer techniques (cont'd)
motion-picture film on, in metallurgy, chemistry, biochemistry, and plant physiology, 6: 5357(J)
moving-picture film on methodology, 6: 2840(J)
in paper chromatography, 6: 5084(J)
in study of movement of underground waters, 6: 4519(J)
in wood and paper technology, 6: 5092(J)
Tracer techniques (agriculture)
bibliography, 6: 5726(J)
motion-picture film on, 6: 5294(J)
problems arising in, 6: 1984(J)
review, 6: 1983(J)
Tracer techniques (biology)
bibliography, 6: 73(J), 5727(J), 5738(J)
dosage received from tracers, 6: 6283(J)
mathematical analysis of, 6: 6295(J)
mathematical treatment of tracer experiments on metabolic pathways, 6: 5039(J)
methods for $P^{32}$ labeling of screw-worm fly, 6: 5296(J)
review, 6: 3943(J)
Tracer techniques (botany)
review, 6: 1621(J)
Tracer techniques (chemistry)
bibliography, 6: 5763(J)
Tracer techniques (geology)
bibliography, 6: 5780(J)
Tracer techniques (metallurgy)
for assessing wear of wire-drawing dies, 6: 195(J)
in study of mechanism of corrosion inhibitors, 6: 4518(J)
Tracer techniques (mineralogy)
in flotation and beneficiation studies, 6: 251(R)
review and bibliography, 6: 5613
Tracerlab, Inc.
progress reports, 6: 4748(R)
Tradescantia
effects of varying doses of γ radiation on, 6: 5936
Transducers
design, 6: 3818(R), 5830(R)
Transformation temperatures
(See also specific materials and subheadings transformation temperatures and phase studies.)
thermo-critical point unit for measurement of, design, 6: 2084
Transistors
characteristics and applications of, 6: 2679
Transuranic elements
(See also specific elements.)
absence in nature, reason for, 6: 2059(J)
discovery and formation of, review, 6: 2058(J)
discovery and present knowledge of, review, 6: 3262
energy levels, for even-even nuclides, 6: 4193
properties of, review, 6: 3263(J)
Trauma
surgical, effects on plasma sulfhydryl and polysaccharide levels, 6: 1594
surgical, effect on plasma sulfhydryl and protein levels, 6: 2246
surgical, effects on plasma sulfhydryl levels, 6: 1593
Treasure Hill Area (Colorado)
geology and prospecting of, for U, 6: 1456
Treasure Hill Claims (Colorado)
prospecting for U, 6: 1456
Tricarboxylic acids
tissue distribution, 6: 4693(R)
Trichinosis
radiation effects on susceptibility and immunity of mice to, 6: 5261
Trillium
distribution and behavior of supernumerary chromosomes in, 6: 2247
Trisilylamine
molecular structure, 6: 136
Tritium
(See also Hydrogen.)
bibliography, 6: 5997
bombardment with, techniques of, 6: 3111(J)
detection and measurement with internal counter, 6: 5160(J)
determination in organic substances, apparatus for, 6: 2353(J)
determination with proportional counters, 6: 5836(J)
deuteron, proton, and triton absorption and scattering by, 6: 1859
deuteron reactions (d,n), 6: 3407
deuteron reactions (d,n), energy, 6: 4198
deuteron reactions (d,n), neutron production by, 6: 1525
deuteron scattering cross sections, 6: 3856
exchange between $H_3PO_2$ and HTO, 6: 2904(J)
formation by $Be^9$ (d,t), 6: 2489(J)
Tritium (cont'd)
helium nucleus capture by, energy spectrum of particles from, 6: 6624(R)
mammalian uptake by lung, from labeled water vapor, 6: 1088(J)
mass spectrographic determination, 6: 2352
$\pi^-$-meson absorption from K shell of, ratio of nonradiative to radiative, 6: 5849(J)
molecular spectra, 6: 3127
molecular volume, 6: 2025(J)
neutrino mass from β spectrum of, 6: 1837(J)
nuclear properties, 6: 1928
photodisintegration cross sections of, calculations, 6: 1868(J)
polarization of, formed by (d,d) reaction, 6: 5480(J)
production from Li, 6: 2492(J)
proton reactions (p,γ), angular distribution of γ rays, 6: 3101(J)
proton reactions (p,n), cross sections, 6: 5474(R)
radioautographic uses of, 6: 61(J)
review, 6: 4038(J)
spectra, 6: 2895(R), 3042
targets of, preparation, 6: 2759
tolerance levels, 6: 1088(J)
toxicology, 6: 526(R)
Tritium oxides
(See Water-dt; Water-t; Water-$t_2$.)
Tritons
acceleration by Cockcroft-Walton accelerator, 6: 1886(J)
angular distribution of, from $Be^9$(d,t), 6: 5661
binding energy, by randomized net-point method, 6: 3837(J)
circulating system for acceleration of, in cyclotrons, 6: 2197
deuteron reactions, 6: 1528
deuteron reactions (d,αn), theory, 6: 6624(R)
formation in reaction ($p + d \rightarrow \pi^+ + H^3$), 6: 4084(R), 4897
mass difference between $2D^2 - H$ and, 6: 2753
measurement of tracks of, in nuclear emulsions, 6: 644
nuclear reactions with $Li^6$, 6: 2186(J), 3080(J)
range-energy relation of, from $Be^9$ (d,t), 6: 375(J)
reactions with $Li^6$, $Li^7$, and $N^{14}$, 6: 4225(J)
Tropolone complexes
with beryllium, Ca, Co, Cu, Pb, Mg, Ni, and Zn, formation constants of, 6: 6534
Tropolones
methyl, isopropyl, and bromo, dissociation constants, 6: 6534
Tubes
(Generally thin-walled, small diameter; see also subheading under specific reactors; see also Electron tubes; Geiger-Mueller tubes; Pipes; Reactor tubes.)
circular, heat transfer and friction coefficients for air flowing in, 6: 5089
heat transfer and friction coefficients for subsonic flow of air in smooth, at high surface and fluid temperatures, 6: 3268
heat transfer in, by forced convection, 6: 867
heat transfer of turbulent air flow in, 6: 2067
thermal stresses and deformations in, 6: 3269(J)
Tumors
(See also specific tumors, organs, tissues, animals, etc.; see also the subheading biological effects under radiations; see also Carcinomas; Sarcomas.)
application of quantum hit theory to virus-provoked, 6: 3161(J)
blood volume determinations of, compared with normal organs, 6: 1985(J)
of bone, diagnosis and treatment with radioactive Ga, 6: 1106(J)
diagnosis by selective concentration of porphyrins, acridines, and fluorescein in, 6: 3208(J)
diagnosis of malignant, possible blood test for, 6: 5550(R)
diagnosis of metastatic lesions in chest by radioautography of entire chest combined with radiography, 6: 6280(J)
diagnosis with $I^{131}$-labeled porphyrins, 6: 5083(J)
effects of cysteine on radiosensitivity of, 6: 1608
effects of flavones administered before and after irradiation on radiosensitivity of transplanted rat, 6: 6285(J)
effects of injected azide or hydroxylamine on radiosensitivity of, 6: 6262(J)
effects of nitrogen mustard or irradiation on level of serum polysaccharide in patients with malignant, 6: 6505(J)
effects of radiation on cells of, 6: 65(J)
effects of x radiation and Ra on cells of, 6: 3175(J)
effects of x radiation on cell cultures of, 6: 3170(J)
effects on metabolism of nucleic acids, 6: 2288
enzymes of the citric cycle in, 6: 761
fatty acid synthesis in, in vitro tracer study, 6: 6578
head and neck, treated with $Co^{60}$, 6: 1103(J)
incidence, latent period, and organ distribution of lymphoid, after total-body x radiation of mice, 6: 6282(J)

Tumors (cont'd)
incidence of, mathematical analysis, 6: 2564
induced by β particles in rats, 6: 506(R)
induced by $I^{131}$, 6: 776(J)
induction by radiation, effects of prolonged depression of hematopoietic system on, 6: 4689(R)
localization of brain, with $I^{131}$, 6: 2844(J)
localization of intraocular, by measurement of $P^{32}$ uptake, 6: 2852(J)
location by radioisotope accumulation, collimators for, 6: 5157(J)
lung, treatment by intracavitary administration of $Au^{198}$ following pneumonectomy, 6: 5959
lymphoid, factors affecting induction by x rays, 6: 3179(J)
lymphoid, inhibition by shielding during partial-body irradiation, 6: 1382(J)
metabolism in, 6: 6239
metabolism of lactates in, 6: 171(J)
metabolism of P in various fractions derived from two types of mouse mammary, 6: 2841(J)
origin of, mutation theory, 6: 18(J)
palliative treatment of pleural and peritoneal effusions accompanying malignant with colloidal $Au^{198}$, 6: 5962(J)
peritoneal cavity, effects of colloidal $Au^{198}$ on cells of, 6: 5945(J)
pituitary, effects of radiation thyroidectomy on induction in mice, 6: 6249(J)
pituitary, induced by $I^{131}$ treatment, 6: 3498(J)
pituitary, induced in mice by $I^{131}$, morphology of, 6: 1076, 1080
pituitary, resulting from radiothyroidectomy followed by whole-body x irradiation, 6: 5938
plasma sulfhydryl levels during growth and regression of, 6: 5544
prostate, colloidal $Au^{198}$ in therapy, 6: 6281(J)
pyruvate oxidation in mitochondria of, 6: 760
radioinduced ovarian, types of, 6: 3177(J)
radioisotope therapy, review, 6: 3927(J)
radioresistance, mechanism of, 6: 3154
radiosensitivity effects, 6: 520(R)
radiosensitivity of, effects of nucleic acids on, 6: 3180(J)
radiotherapy, relative effects of α, β, γ and neutron radiation, 6: 4713
radiotherapy of bilateral retinal gliomas, case histories, 6: 6518(J)
skin, therapy with $As^{76}$, 6: 1614(J)
therapy by injection of colloidal $Au^{198}$ into, 6: 6289(J)
therapy of brain, using radioactive chromic phosphate and colloidal Au, 6: 6287(J)
therapy of Hodgkin's disease with $P^{32}$, 6: 3506(J)
therapy of malignant melanomas with $P^{32}$, 6: 5554(J)
therapy of pleural effusions and ascites associated with malignant, with colloidal $Au^{198}$, 6: 6288(J)
therapy with radioactive Ag colloids, 6: 3191(J)
therapy with x-ray beam of betatron, 6: 1974(J)
thyroid, evaluation of $I^{131}$ therapy in, 6: 5288(J)
thyroid, induced by $I^{131}$, 6: 4357(R)
thyroid, $I^{131}$ in diagnosis and treatment of, 6: 5961(J)
toxicity of, therapy with vitamin $B_{12}$, 6: 55(J)
transplantation of human, into irradiated rats, 6: 5925
transplantation of $I^{131}$-produced pituitary, to normal and $I^{131}$-treated hosts, 6: 1080
Tungsten
absorption of $Co^{60}$ γ rays in, 6: 2203(J)
colorimetric determination in Ti, 6: 2312(J)
corrosion by liquid Bi, 6: 900
electric conductivity of, effect of elastic deformation on, 6: 241(J)
electric resistance and magnetoresistance at low temperatures, 6: 5622(J)
gamma absorption coefficients, experimental and theoretical, 6: 5217(J)
gamma reactions (γ,n) at 320 and 160 Mev, 6: 1538
gravimetric determination in Ti and Ti alloys, 6: 5740
gravimetric determination in Ti and Ti alloys using alpha benzoinoxime 6: 3523
magnetic structure of, from neutron-diffraction studies, 6: 3674
magnetic susceptibility, 6: 5116
mechanical properties at high temperatures, 6: 2930
neutron scattering by, 6: 4971(J)
physical properties, review of literature and bibliography on, 6: 4075
proton elastic scattering cross sections, 6: 3422(J)
proton reactions (p,n), 6: 370(J), 1859, 1887
proton reactions (p,n), thick-target yield in, 6: 1535
proton reactions (p,π), cross sections, 6: 3825
tissue distribution, 6: 2809, 3156
Tungsten borides
preparation and physical properties, 6: 4408(J)
Tungsten carbide–tantalum carbide–titanium carbide systems
phase studies, 6: 1126(J)
Tungsten carbides
friction coefficients and surface damage of, 6: 2672
metallography of, with polarized light, 6: 1228
Tungsten compacts
effect of cold work on thoriated, 6: 6363
Tungsten fluoride–pentane, dodecafluoro- systems
thermodynamic properties, 6: 5328
Tungsten fluorides
molecular structure from infrared and Raman spectra, 6: 3132(J)
preparation and vapor pressure, 6: 5328
Tungsten isotopes $W^{181}$
separation, 6: 3156
separation from deuteron-bombarded Ta, 6: 152
Tungsten isotopes $W^{183}$
isomeric transition, 6: 409
packing-fraction differences involving, mass-spectrographic measurement of, 6: 2991
Tungsten isotopes $W^{185}$
neutron activation cross sections, 6: 3391
packing-fraction differences involving, mass-spectrographic measurement of, 6: 2991
Tungsten isotopes $W^{187}$
decay schemes, 6: 444(R)
gamma spectra, 6: 446(R)
Tungsten minerals
diagnostic associates in Morocco, 6: 1460(J)
Tungsten–titanium alloys
phase studies, 6: 1732
Tungsten–zirconium alloys
constitution diagrams, 6: 591(R), 4505(R)
Turbines
high speed rotary, design, 6: 6218(P)
Turbojet engines
control systems for, mathematical analysis of, 6: 860
for nuclear aircraft, design, 6: 1589
Turbulent flow
(See Fluid flow (turbulent).)

## U

Ultrasonic radiation
isotope separation by, 6: 286
Ultraviolet radiation
disruption of mitochondria of Saccharomyces by, 6: 4354
effects on grasshopper neuroblasts, 6: 43(J)
effects on sulfhydryl- and disulfide-containing amino acids, 6: 2624
effects on yeast, 6: 4356
inactivation of pepsin by, 6: 4437
lethal effects on yeast, 6: 10
mutation rates induced by, modification in Aspergillus terreus, 6: 4368(J)
mutations induced in E. coli by, effects of streptomycin on, 6: 4366(J)
Ultraviolet spectra
(See also as subheading under specific materials.)
vacuum, review of methods of measurement, 6: 3727(J)
University of Southern Calif.
progress reports, 6: 2678(R)
Uracil
synthesis of $C^{14}$-labeled, 6: 4454(J)
Uracil, 2-thio-
radiosensitivity effects, 6: 6276(J)
Uraninite
crystal structure of, from Brazil, 6: 2315(J)
Uranium
abundance in meteorites, 6: 1754
activation determination of micro-quantities in minerals and rocks, 6: 5741
allotropic transformation temperatures, effect of cooling rate on, 6: 5374
analysis for V, 6: 5320(J)
chromatographic determination in minerals and ores, 6: 5071(J) 5072(J)
chromatographic determination in uranothorianite, 6: 2875(J)
colorimetric determination with 2,4-dihydroxyacetophenone oxime, 6: 6345(J)
concentration in ocean and river sediments, 6: 3113(J)
concentration in sea water, determination by fluorimetry, 6: 1403(J)
coulometric analysis for V, 6: 574(J)
coulometric determination, 6: 90(R), 2874
crystal structure, 6: 121(J)
crystal structure of β phase, 6: 1183, 5324(J)
deformation textures, 6: 1478(J)
detection of fission fragments with spark counter, 6: 5648(J)
determination from α ranges in nuclear emulsions, 6: 2160(J)
determination in ores, 6: 6304(J)

Uranium (cont'd)
determination in ores by photographic film detectors, 6: 3366(J)
determination in rocks, nuclear emulsion technique for, 6: 5148(J)
determination in U-Hg alloys, 6: 545
distribution in Cashiers and Zirconia District, North Carolina, 6: 4496
effects on metabolism of yeast cells, 6: 2282(J)
ether extraction from mixed fission products, 6: 6291(R)
excretion, effect of Na hexametaphosphate on, 6: 4380
fission, theory of, 6: 1840
fission by $\mu^-$ mesons and fast protons, possibility of, 6: 6670
fission induced by mesons, 6: 1860
fission products of, $Be^7$ in, 6: 358
fluorimetric analysis, removal of Ce interference with, 6: 3231
fluorimetric and volumetric determination in carnotite ores, 6: 6053
fluorimetric determination in lignites, monazites, and shales, 6: 1136
fluorimetric determination in minerals, 6: 1404(J)
furnacing and casting, 6: 2384(J)
gamma absorption by, 6: 680(R), 1543
gamma absorption by, ratio of K and L, 6: 2766(J)
gamma absorption by L shell, 6: 6182(J)
gamma absorption coefficients, experimental and theoretical, 6: 5217(J)
gamma scattering in, theory, 6: 3421(J)
Gmelin's handbook on, translation of pgs. 142-221, 6: 3550
gravimetric determination in Co-U alloys, 6: 2309
heat capacities in range 15 to 300°K, 6: 4298(J)
heat of combustion, 6: 2061
induction of bone tumors by, in mice, 6: 2567
ion exchange with fission products and Th, 6: 76
kidney pathology caused by, 6: 2835(J)
L x rays of, in $Pu^{239}$ decay, 6: 5911
magnetic susceptibility, 6: 1433, 1943(J)
$\mu^-$-meson capture by, 6: 6670
metallography of, with polarized light, 6: 1228
microstructure, 6: 2374
neutron absorption by, reactor oscillator studies, 6: 4917(J)
neutron absorption cross sections of, noncritical assembly for measuring, 6: 3384
neutron absorption resonances, studies with time-of-flight method, 6: 4642
neutron capture cross section, 6: 1540(J)
neutron-diffraction scattering amplitudes, 6: 2118(J)
neutron emission of natural, by spontaneous fission, 6: 2539(J), 3444(J)
neutron fission cross section of natural, ratio to $Pu^{239}$, 6: 5885(J)
neutron total resonance absorption, effect of geometry on, 6: 4196
occurrence in phosphate deposits of Morocco, 6: 2658(J)
occurrence in Utah (Piute Co.), 6: 1221, 1222, 1223, 1224
oxidation, 6: 2063(J)
oxidation in $O_2$, 6: 1435(J)
oxidation of tetravalent, by air, factors affecting, 6: 5051
photofission, 6: 4724(R)
photofission, isotope yields in, 6: 1424(R), 5298(R)
physical properties, bibliography, 6: 5787(J)
plastic deformation, mechanism of, 6: 226
potentiometric determination in presence of Fe, 6: 1649
preferred orientation, quantitative determination of, 6: 6725
preferred orientation in rolled, 6: 1477(J)
preparation of metallographic specimens of, 6: 2374
production at Bouchet Plant of French Atomic Energy Commission, 6: 5358
production from $UO_2$, review of methods for, 6: 218(J)
proportion of, in earth's radioactivity, 6: 6360(J)
proton fission, asymmetry of yields in, 6: 3845
proton fission yields of $Ba^{140}$, $Mo^{99}$, and $Ag^{111}$ from, 6: 1856, 3406
radioactivation determination in rocks and minerals, 6: 5737
reactions between U(VI) and U(IV) in carbonate media, polarographic study of, 6: 855
reactions with $H_2$, HD, and $D_2$, 6: 573, 3347(J)
reduction by Cd amalgam and coulometric titration of, 6: 1400
sample preparation for mass spectrographic analysis, 6: 5238
separation of Th from, 6: 1148(J)
spectrophotometric determination in presence of Fe, 6: 6541
thermal expansion at low temperatures, measurement, 6: 2799(J)
thermal neutron fission cross sections, 6: 6456(J)
toxicity, relation of particle size of inhaled $UO_2$ dust to, 6: 4715
toxicology, 6: 528(R)
urinary excretion of, effect of polyphosphates on, 6: 5541(R)
vacuum fusion analysis for $O_2$, $N_2$, and $H_2$, 6: 3254(J)
volumetric determination, high precision method for, 6: 2011
volumetric determination in U(VI) phosphate solutions, 6: 5735
volumetric determination of mg quantities, 6: 5054(J)
volumetric determination with Jones reductor, 6: 5051
Uranium (cont'd)
volumetric determination with Jones reductor, noninterference of arsenate ion in, 6: 6305
x-ray absorption determination, 6: 5314
x-ray absorption determination in solution, effect of contaminants on, 6: 5310
x-rays of, in decay of $Pa^{232}$, $Pa^{233}$, and $Pu^{239}$, 6: 4657
Uranium acetyl acetonate
angular dependence of paramagnetism on powdered and crystal forms of, microwave measurements, 6: 2242
Uranium alloys
constitution diagrams, 6: 5787(J)
magnetic susceptibility, 6: 1433
Uranium–aluminum alloys
metallography of, with polarized light, 6: 1228
Uranium–bismuth alloys
x-ray diffraction analysis, 6: 4074
Uranium borohydrides
preparation, 6: 4307(P)
Uranium(IV) bromides
absorption spectra and structure, 6: 5086(J)
preparation, 6: 5085(J)
Uranium carbides
preparation, methods for, 6: 1564(P)
preparation, melting point, and crystal structure, 6: 3566(J)
thermal conductivity, 6: 4074
Uranium carbonate–sodium carbonate–water systems
phase studies, 6: 180
Uranium chelates
infrared and Raman spectra of, with 2,4-pentanedione, 6: 2882(J)
Uranium chlorides
absorption spectra and structure, 6: 5086(J)
preparation, 6: 5085(J)
Uranium(III) chlorides
angular dependence of paramagnetism on powdered and crystal forms of, microwave measurements, 6: 2242
Uranium(IV) chlorides
adsorption spectra, 6: 1628
production from uranium oxide, 6: 463(P)
Uranium(V) chlorides
angular dependence of paramagnetism on powdered and crystal forms of, microwave measurements, 6: 2242
preparation, process and apparatus for, 6: 1569(P)
Uranium(VI) chlorides
preparation, process and apparatus for, 6: 1569(P)
production from uranium pentachloride, 6: 460(P)
purification and packaging, 6: 466(P)
Uranium–chromium alloys
crystal structure, 6: 121(J)
crystal structure of $\beta$ phase, 6: 1183
magnetic susceptibility, 6: 1433
Uranium–cobalt alloys
analysis, 6: 2309
of composition $UCo_3$, 6: 471(P)
magnetic susceptibility, 6: 1433
Uranium–cobalt compounds (intermetallic)
of composition $U_6Co$, 6: 472(P)
Uranium complexes
with aroylaldehydes, preparation, 6: 4299(P)
Uranium compounds
physical properties, bibliography, 6: 5787(J)
Uranium deposits
diagnostic associates, 6: 1458
in North Africa phosphates, 6: 2660(J)
origin of, in Shinarump Formation, Colorado Plateau, 6: 891(R)
Uranium deposits (Colorado)
in radioactive tertiary porphyries in Central City district, 6: 6356
Uranium deposits (France)
discovery and development of, program of Commissariat a l'Energie Atomique, 6: 3284(J)
location and type, 6: 4503(J)
occurrence and distribution, 6: 4064(J)
Uranium deposits (Morocco)
occurrence, 6: 2659(J)
occurrence in phosphate deposits, 6: 2922(J)
Uranium deposits (North Carolina)
pegmatite minerals of rare-earth type in, 6: 4496
Uranium(IV) fluoride addition compounds
magnetic susceptibilities, measurements of, 6: 2242
Uranium fluorides
electrodeposition from $UO_2NO_3$ containing NaF, 6: 6211(P)
magnetic properties of solutions with $ThF_4$, 6: 857(J), 4039(J)

Uranium(III) fluorides
determination by ceric sulfate titration and by $H_2$ evolution with HCl, 6: 5309
Uranium(VI) fluorides
critical temperature and pressure of, 6: 2060
mass spectrographic separation of U isotopes in, methods of calculation of, 6: 288
molecular structure from infrared and Raman spectra, 6: 3132(J)
preparation, 6: 5358
reduction with Ca, 6: 5358
solubility in $H_2O$, 6: 4763
Uranium hydrides
explosive limits, 6: 1627
preparation, 6: 3460(P)
Uranium(IV) iodides
vapor pressure, 6: 2593
Uranium(III) ions
absorption spectra and transition probabilities for, 6: 3418
Uranium(V) ions
disproportionation in light and heavy water, 6: 1992
Uranium(VI) ions
chromatographic separation from metals with 2-methyltetrahydrofuran, 6: 6575
infrared spectra and atomic structure, 6: 3259
Uranium isotopes
gamma spectra, 6: 3712
mass spectrographic separation of, in $UF_4$, 6: 288
rapid separation methods for, from cyclotron bombarded $Th(NO_3)_4$, 6: 1685
Uranium isotopes $U^{227}$
radioactive chain collateral to Ac (4n + 3) family, 6: 2533
Uranium isotopes $U^{233}$
fission of, velocities of fragments from, 6: 3053
fission product yields, 6: 1857
gamma and x-ray emission, studies with proportional detector, 6: 5698
internal-conversion electron emission, 6: 6193(J)
metabolism in mice, 6: 4388(J)
solvent extraction, development of equipment and procedures, 6: 6574
Uranium isotopes $U^{234}$
alpha activity, determination, 6: 3866
energy levels in, 6: 2946
mass, 6: 3061(J)
specific alpha activity and half life, 6: 4249
spontaneous fission, 6: 4222
Uranium isotopes $U^{235}$
beta emission of fission products of, 6: 4984
fission, 6: 493(J), 698
fission, ternary, 6: 707(J)
fission, velocities of fragments from, 6: 3053
fission-fragment energy distribution as function of neutron energy, 6: 3846
fission neutron spectra, 6: 3393, 4866, 6173(J)
fission products of, 6: 1327(J)
fission product yields, 6: 1857
heat production by, in earth, 6: 6361(J)
mass, 6: 3061(J)
nuclear properties, 6: 1928
solvent extraction, development of equipment and procedures, 6: 6574
specific alpha activity and half life, 6: 4249
thermal fission, $\alpha$-particle and proton spectra from, 6: 6172(J)
Uranium isotopes $U^{236}$
specific alpha activity and half life, 6: 4249
Uranium isotopes $U^{237}$
decay schemes, 6: 4981
formation by $U^{238}$ $(\gamma,n)$, yield as function of $\gamma$ energy, 6: 4632
gamma and x-ray emission in decay of, 6: 4657, 4919
Uranium isotopes $U^{238}$
binding energy of, calculation, 6: 333(J)
decay of, fine structure in, 6: 1921(J)
disintegration by positron-electron (K) annihilation, 6: 2490(J)
fission-fragment energy distribution as function of neutron energy, 6: 3846
heat production by, in earth, 6: 6361(J)
internal conversion, 6: 2786(J)
mass, 6: 3061(J)
neutron capture cross sections, ratios in pitchblende for the reactions (n,2n) and $(n,\gamma)$, 6: 3811
neutron capture cross sections, Szilard-Chalmers effects on, 6: 5878(J)
photofission, 6: 6531(R)
photofission to $(\gamma,n)$ ratio as function of $\gamma$ energy, 6: 4632
Uranium isotopes $U^{239}$
internal conversion, 6: 409
Uranium–magnesium alloys
metallography of, with polarized light, 6: 1228
Uranium–manganese alloys
magnetic susceptibility, 6: 1433
Uranium–mercury alloys
chemical analysis, 6: 545
crystal structure, 6: 3537(J)
Uranium minerals
(See also specific minerals and ores; see also Uranium ores.)
age determination of, method for, 6: 3283(J)
age estimations by the $Pb^{210}$ method, 6: 6052
analysis by comparison of absorption coefficients, 6: 3966(J)
bibliography, 6: 5780(J)
chemical analysis, 6: 4502(J)
determination of Th/U ratio in, by x-ray emission spectrography, 6: 4778(J)
occurrence and distribution in France, 6: 4064(J)
occurrence in Clear Creek County, Colorado, 6: 214
optical properties, 6: 4502(J)
preparation of artificial, 6: 4502(J)
synthesis, 6: 5765(R)
x-ray-diffraction analysis, 6: 4502(J)
Uranium–molybdenum alloys
chemical analysis, 6: 544
Uranium–nickel alloys
magnetic susceptibility, 6: 1433
Uranium–niobium alloys
chemical analysis, 6: 5050
Uranium nitrides
thermal conductivity, 6: 4074
Uranium ore processing plants
flotation flowsheets, 6: 6598
Uranium ores
(Including tailing, residues, etc., worked for recovery of uranium; see also specific ores, e.g., Carnotite ores; Chattanooga shales; Pitchblende; see also Uranium minerals.)
age estimations of, U-Pb method for, 6: 5598(R)
beneficiation, 6: 251(R)
bibliographies, 6: 212
concentration with the Lapointe picker belt, 6: 3568
extraction of U from, in Norway, 6: 217(J)
flotation tests, pilot plant, 6: 6598
fluorimetric analysis for U, 6: 3231
genesis, 6: 5776
mining in Colorado Plateau, 6: 2077(J)
occurrence in Argentina, 6: 215(J)
radioautographic analysis, 6: 1809(J)
radiometric analysis, correction for radioequilibrium, 6: 6123
radiometric analysis for $U_3O_8$, 6: 1220
radiometric analysis using nuclear emulsion techniques, 6: 3967(J)
sampling, plant for, 6: 2923(J)
Uranium oxalates
actinometry at high temperatures, 6: 4040(J)
magnetic susceptibilities, measurements of, 6: 2242
Uranium oxide–aluminum oxide systems
phase studies, 6: 3772
Uranium oxide–cerium oxide systems
phase studies and crystal structure, 6: 5572(J)
semiconductive properties, 6: 2062(J)
Uranium oxide crucibles
fabrication from $UO_2$, 6: 3280
Uranium oxide–erbium oxide systems
phase studies and crystal structure, 6: 2354(J)
Uranium oxide–magnesium oxide systems
phase studies, 6: 3772
Uranium(IV) oxide–neodymium oxide systems
phase studies, 6: 3772
Uranium(IV-VI) oxide–neodymium oxide systems
phase studies, 6: 3772
Uranium oxide–praseodymium oxide systems
phase studies and crystal structure, 6: 5573(J)
Uranium(VI) oxide systems
phase studies, 6: 180
Uranium oxide–thorium oxide systems
lattice constants and magnetic susceptibility, 6: 5247
semiconductive properties, 6: 2062(J)
Uranium oxides
analysis for O, 6: 5736
composition, 6: 856(J)
crystal structure, by x-ray-diffraction, 6: 4498(J)
electrodeposition, process for, 6: 1568(P)

Uranium oxides (cont'd)
lung deposition and retention of, following inhalation, 6: 1089(J)
oxidation inhibitor for, 6: 4306(P)
phase studies between $UO_2$ and $U_3O_8$, 6: 3773(J)
pulmonary absorption, effect of particle size on, 6: 4715
refining, review of methods for, 6: 218(J)
spectrophotometric analysis for N, 6: 5308
total neutron resonance absorption, effects of geometry on, 6: 4196
total neutron resonance absorption, temperature effect on, 6: 4195
Uranium(IV) oxides
fabrication of refractories from, 6: 3280
fluorination, 6: 5358
heat capacities in range 15 to 300°K, 6: 4298(J)
heat of formation and combustion, 6: 2061
magnetic susceptibility at low temperatures, 6: 4297(J)
melting point and crystal structure, 6: 3566(J)
neutron diffraction by, 6: 2118(J)
production at Bouchet Plant of French Atomic Energy Commission, 6: 5358
reduction with Ca or Mg, 6: 5358
spectra, 6: 3630
Uranium(IV-VI) oxides
crystal structure, 6: 2354(J)
determination in $UO_3$, 6: 5313
heat of formation, 6: 2061
oxidation, 6: 5313
oxidation inhibitor for, 6: 4306(P)
production from ores in Norway, 6: 2171(J)
radiometric determination in uranium ores, 6: 1220
Uranium(VI) oxides
analysis for $U_3O_8$, 6: 5313
heat capacities in range 15 to 300°K, 6: 4298(J)
production at Bouchet Plant of French Atomic Energy Commission, 6: 5358
reactions with $Na_2CO_3$ and $NaHCO_3$, 6: 2905(J)
reduction, 6: 5313
Uranium(VI) phosphates
reduction to U(IV) phosphates, 6: 5735
volumetric analysis for U(VI), 6: 5735
Uranium poisoning
treatment with Na hexametaphosphate, 6: 4380
Uranium powders
explosive limits, 6: 1627
Uranium reserves, 6: 5597
Uranium single crystals
preparation by strain-anneal and phase-change methods, 6: 2613
Uranium sulfate complexes
association constants, analysis of general mathematical formulation for, 6: 4572
Uranium sulfates
magnetic susceptibilities, measurements of, 6: 2242
Uranium–tantalum alloys
chemical analysis, 6: 5050
Uranium–titanium alloys
phase studies and constitution diagrams, 6: 5105
Uranium–vanadium alloys
constitution diagram, metallurgy, and properties, 6: 2082
Uranium–vanadium sandstone deposits
geophysical investigation by resistivity and potential-drop methods, 6: 5597
Uranium–vanadium sandstone deposits (U.S.)
diagnostic associates, 6: 5776
Uranothorianite
chromatographic analysis, 6: 2875(J)
Uranothorite
occurrence and identification in Blue Jay Mines, 6: 1453
Uranyl acetates
removal of Na impurity in, 6: 3552(J)
Uranyl carbonate systems
phase studies, 6: 180
Uranyl carbonates
preparation and properties of Ba, Ca, Mg, and Sr, 6: 5087(J)
Uranyl chlorides
absorption spectra and structure, 6: 5086(J)
preparation, 6: 5085(J)
Raman spectra, 6: 156
Uranyl complexes
with (ethylenediamine)tetraacetic acid and nitrilotriacetic acid, properties, 6: 3771
Uranyl compounds
(See also specific compounds.)
fluorescence in crystalline, explanation for protracted duration, 6: 3554(J)
fluorescence in crystalline, line width, 6: 3551(J)
Uranyl compounds (cont'd)
luminescence spectra and extinction of, 6: 3264(J)
Uranyl fluorides
activity coefficients and dimerization in water, 6: 5766(J)
activity coefficients at 30°C by ultracentrifugal measurements, 6: 4420
molecular structure, 6: 4420
Uranyl ions
infrared spectra and atomic structure, 6: 3259
solvent extraction with thenoyltrifluoroacetone, 6: 2047
spectrophotometric determination by thiocyanate method in acetone medium, 6: 2644
Uranyl nitrate complexes
chemical stability of uranyl nitrate-organic addition compounds, 6: 6017
Uranyl nitrate crystals
natural scintillations from, 6: 3008(J)
Uranyl nitrate systems
ion exchange in, involving Th and fission products, 6: 76
Uranyl nitrates
fission activity distribution in bombarded, 6: 731
heats of solution in $H_2O$ and organic solvents, and binding energies of molecular ligands, 6: 3216
luminescence spectra of, effects of hydrolysis products on, 6: 3553(J)
nephrosis induced by, and protective effect of testosterone, 6: 3510(J)
Raman spectra, 6: 156
solubility in 1,2-dichloroethane, 6: 3513
Uranyl oxalates
solubility in concentrated $HNO_3$, 6: 5589(J)
Uranyl sulfate complexes
potentiometric and extinctiometric studies of, 6: 1434(J)
Uranyl sulfates
luminescence spectra of, effects of hydrolysis products on, 6: 3553(J)
preparation and properties, 6: 3583(R)
spectrophotometric analysis for N, 6: 5308
Urea
explosion in synthesis of $N^{15}$-labeled, 6: 4461(J)
plant metabolism, following foliar application, 6: 4716
reaction with $K_2CO_3$, mechanism of, 6: 4026(J)
synthesis of $C^{14}$- and $N^{15}$-labeled, 6: 4026(J)
synthesis of $C^{14}$-labeled, 6: 4465(J)
Urea, thio-
effect on hematopoietic regeneration in whole-body irradiated rats, 6: 5013(J)
radiosensitivity effects, 6: 6276(J)
Urea, thio- complexes
with ruthenium, formation and properties, 6: 1119
Urease
molecular weight of, determined after deuteron inactivation, 6: 6329(J)
Urethan
(See Carbamic acid, ethyl ester.)
Urine
analysis, 6: 1(R)
analysis for As by radioactivation, 6: 3756
analysis for enriched U, 6: 6511(R)
analysis for gross radioactivity, 6: 103
analysis for μμg quantities of Ra, 6: 2313(J)
analysis for polyglucose, 6: 1652
collection on an out-patient basis, portable equipment for, 6: 3882
colorimetric and fluorimetric determination of Ga in, 6: 5538
effects of saline and pituitary hormone on excretion of, by the rat, 6: 1622(J), 1623(J)
extracts from, in therapy of radiation injuries, 6: 4710
radiometric analysis for K, 6: 1116
radiometric assay for $I^{131}$ excretion in human, 6: 5977(J)
rapid estimation of tracers in, apparatus for, 6: 1975(J)
salts, chemical analysis for Zr, 6: 6538
Uronic acids
analysis and separation of glucuronic and galacturonic acids by ion exchange, 6: 4683(J)
Utah (Piute Co.)
exploration of Benny K claims for uranium, 6: 1221
exploration of Dark Horse and Saturday Claims areas for uranium, 6: 1224
exploration of East Slope Area for uranium, 6: 1222
exploration of Papsy's Hope prospect for uranium, 6: 1223

## V

V particles
(See also S particles.)
decay, 6: 4599(J), 4601(J)
decay, charge-independence hypothesis in, 6: 2723(J)
decay of neutral, 6: 2406(J)
decay products of charged, transverse momentum spectrum, 6: 6136(J)
decay products of neutral, detection of, 6: 1872(J)

V particles (cont'd)
decay products of neutral, nuclear interactions of, 6: 2110(J)
decay schemes, 6: 6620(R)
formation and decay schemes of neutral, 6: 1488
formation of neutral, by bremsstrahlung on C and Pb, 6: 1872(J)
identity with $\kappa$ meson, and review of properties, 6: 5850(J)
interactions with scalar mesons, 6: 4604(J)
interactions with $\tau$ mesons, 6: 4599(J)
isotopic spin and stability of, against $\pi$ and $\gamma$ emission, 6: 3322(J)
lifetime measurements in cloud chambers, technique, 6: 6137(J)
mass and decay schemes, 6: 264(J)
mass and half life, cloud chamber studies, 6: 3599(J)
model of, proposed, 6: 4600(J)
multiplate-cloud-chamber study, 6: 5404(R)
neutral particle in decay of neutral, tests for presence of, 6: 5628(J)
production, 6: 4599(J)
production, interactions responsible for, 6: 3143(J)
production, theory, 6: 4601(J)
production and decay mechanisms, theory, 6: 4531(J)
properties, theory, 6: 4602(J)
properties and decay schemes of charged, 6: 4539(J)
tracks showing decay in nuclear emulsions, 6: 4817(J)
Vacuum fusion analysis
(See also as subheading under specific materials.)
design of apparatus for, 6: 2038(R)
Vacuum gages
adsorption manometer for below $10^{-4}$ mm, 6: 3278(J)
using $\alpha$-particles, design, 6: 587(J)
based on optical absorption in Schumann region, design, 6: 879(J)
circuit for, design of, 6: 2147(J)
design, 6: 1750(R)
design and applications of, review, 6: 3279(J)
ion-type, mounting for, 6: 4310(P)
ionization-type, design, 6: 1804(J), 4085(R)
for pressures below 10 mm Hg, review, 6: 582(J)
sensitivity, 6: 5789(R)
for synchrotron vacuum system, performance of, 6: 1209(J)
with thoria-coated cathode, design, 6: 2148(J)
Vacuum pumps
control, 6: 196
design modification of, to simplify oil changing, 6: 877(J)
efficiency, effect of oil distillation on, 6: 880(J)
laboratory, for vacuum evaporation, 6: 2916(J)
portable laboratory stand for, 6: 1208(J)
types of, review and comparison of, 6: 194(J)
Vacuum seals
design, 6: 5716(R)
design of insulator bushing, 6: 4328(P)
for fluorine generation system, design, 6: 470(P)
high speed rotary, design, 6: 6594(J)
rotary, design, 6: 3565(J)
for sealing LiF to Ag at liquid-He temperatures, 6: 5773(J)
Vacuum systems
apparatus for introduction of gas to give known pressure in, design, 6: 881(J)
application of mass spectrometers to problems of, 6: 585(J)
break-off septum for, 6: 5772(J)
cleaning, 6: 3779
cold trap for, 6: 5774(J)
glass sleeve joint for use in coupling components of, 6: 5771
greases used in, outgassing and vaporization characteristics, 6: 4489
industrial, design of, 6: 198(J)
leak detection, 6: 583(J)
leak detector for, 6: 3338(R), 4337(P)
manifold for, 6: 1210(J)
measurement of pressure and contamination in, 6: 1804(J)
in nuclear physics, uses, 6: 2917(J)
performance, 6: 5716(R)
for a proton synchrotron, 6: 586(J)
valves for, design, 6: 2367
valves for, pneumatically controlled, 6: 1725(J)
Vacuum techniques
book: La technique du vide, 6: 197
manuals on, for beginners, 6: 878
Vacuum valves
modification of steam valves for use as, 6: 4773(J)
"O" ring sealed, design, 6: 2367
straight-line, design, 6: 4055(J)
thermally operated glass, for very small gas flow rates, 6: 6036, 6592
Vagina
effects of x radiation and permissible limits for wall of, 6: 6503(J)
Vagomimetic substances
effects on survival of x-irradiated mice, 6: 1093
Valeric acid
adsorption by steam-activated C black, 6: 3546
Valeric acid, $\alpha$-bromo-
polarographic behavior, 6: 538
Valerophenone
Willgerodt reaction with, nature of labile intermediates participating in, 6: 5355
Valine
synthesis of $C^{14}$-labeled, 6: 4760
Valves
(See also Vacuum valves.)
corrosion-resistant, for remote radiochemical service, 6: 5750
high pressure, design of, 6: 575
for stopping flow of liquid metals, design, 6: 4477
Vanadium
absorption spectra in HCl, 6: 4735(J)
by-product recovery from phosphate rock, 6: 1727
by-product recovery from titaniferous magnetite, 6: 911(J)
colorimetric determination, 6: 90(R)
colorimetric determination with benzohydroxamic acid, 6: 5743(J)
combustion analysis for C, 6: 592
coprecipitation by Fe, Cr, and Al hydroxides, 6: 3542(J)
coulometric determination in U, 6: 574(J)
crushing, forging, pressing, and rolling, 6: 4786(R)
determination in presence of large amounts of U, 6: 5320(J)
effects of oxygen and N on hardness and lattice parameters, 6: 6077(J)
elastic constants measured by ultrasonic pulse technique, 6: 2103
electrodeposition from fused salt electrolytes, 6: 2667(R)
electrolytic polishing, 6: 5657(R)
electroplating, 6: 599(R)
ion-exchange separation from phosphoric acid, 6: 5070(J)
kidney pathology caused by, 6: 2835(J)
magnetic structure of, from neutron-diffraction studies, 6: 3674
magnetic susceptibility, 6: 5116
neutron coherent scattering cross section, 6: 5501(J)
neutron transmission cross sections, 6: 2479(J)
nuclear resonance and electronic structure, 6: 4103(J)
oxidation–reduction states, 6: 542(J)
preferred orientation in, 6: 4514(J)
properties and preparation, review of, 6: 3287
proton reactions at high energies, 6: 5875(R)
radiometric determination, 6: 2018(J)
superconductivity, 6: 1739(J)
uses in reactors, 6: 5787(J)
vacuum fusion analysis for $O_2$, $N_2$, and $H_2$, 6: 3254(J)
volatilization rate in He d-c arc spectroscopy, 6: 2607(J)
Vanadium alloys
forging, hardness, and phase studies, 6: 4785(R)
sigma phase in, 6: 1246(J)
Vanadium borides
crystal structure and properties, 6: 120
preparation and physical properties, 6: 4408(J)
preparation, crystal structure, and electric conductivity, 6: 4407(J)
Vanadium carbide–niobium carbide–zirconium carbide systems
solubility relationships in, 6: 2074
Vanadium carbide–tantalum carbide–zirconium carbide systems
solubility relationships in, 6: 2074
Vanadium carbide–titanium carbide–zirconium carbide systems
solubility relationships in, 6: 2074
Vanadium chlorides
current density vs. cell voltage data for, 6: 2667(R)
decomposition potential, 6: 5397(R)
Vanadium complexes
with 2-methyl-8-quniolinol, stability of, 6: 1141(J)
with water, $CH_3OH$, $C_2H_5OH$, and iso-$C_4H_9OH$, absorption spectra of, 6: 1644(J), 1645(J), 1647(J)
Vanadium compounds
crystal structure, 6: 3526
magnetic shielding effects in, 6: 5668(J)
Vanadium(II) ions
exchange with V(III) ions in $HClO_4$ solution, 6: 5044(J)
Vanadium(III) ions
exchange with V(II) ions in $HClO_4$ solution, 6: 5044(J)
exchange with V(IV) in aqueous $HClO_4$ solution, 6: 3519(J)
Vanadium(IV) ions
chemical properties, 6: 542(J)
exchange with V(III) in aqueous $HClO_4$ solutions, 6: 3519(J)
Vanadium(V) ions
chemical properties, 6: 542(J)
determination by titration with manganic ion, 6: 3236(J)
oxidation of As(III) by, 6: 3233(J)
spectrophotometric determination, 6: 3237(J)
stannometric determination, 6: 3234(J)

Vanadium isotopes
Szilard-Chalmers concentration, 6: 4017(J)
Vanadium isotopes $V^{48}$
gamma radiation accompanying decay of, 6: 4269(J)
Vanadium isotopes $V^{50}$
gyromagnetic ratio, 6: 2744
mass of, and energy available for $\beta^+$ decay, 6: 5188(J)
nuclear magnetic moment, 6: 5668(J)
nuclear resonance, 6: 2744
nuclear spin by paramagnetic resonance, 6: 6150
spins, energies, and magnetic moments of nuclear levels of, 6: 6444(J)
Vanadium isotopes $V^{51}$
nuclear magnetic resonance, shifts due to magnetic shielding in compounds, 6: 5668(J)
Vanadium–nickel alloys
structure of $\sigma$ phase of, 6: 1476(J), 3976(J)
Vanadium nitrides
preparation by hot-wire reduction of chloride, 6: 5048(J)
Vanadium ores
genesis, 6: 5776
Vanadium oxides
electrolysis in phosphate melts, 6: 811(J)
preparation by electrolysis, 6: 811(J)
sols of, coagulation with Au, $Fe(OH)_3$ and AgI sols, 6: 95(J)
Vanadium phosphides
preparation by electrolysis, 6: 811(J)
Vanadium–titanium alloys
constitution diagrams, 6: 3794(J)
Van de Graaff accelerators
(For Van de Graaff machines used for instruments other than accelerators see also Van de Graaff generators.)
energy control of ion beams, 6: 3692
gaseous insulator for, $SF_6$ as, 6: 1393(R)
leak detector for, 6: 4128(J)
at Los Alamos, operation, 6: 3881
neutron background of, 6: 1535
operation, 6: 1821(R)
performance and physical measurements of, 6: 6463(J)
sample mounting mechanism and associated equipment for use with, 6: 3413
at University of Zürich, design, 6: 1884(J)
Van de Graaff generators
charged with ionized-air stream, design, 6: 5205(J)
charging rate increase by field extension, 6: 3695(J)
review, 6: 5208(J)
testing of baffles in accelerating tube of, 6: 3387(R)
Vanillic acid
as reagent for determination and separation of Th, 6: 5053(J)
Vapor pressure
(See also as subheading under materials.)
apparatus for measurement of $Al_2O_3$, 6: 6601(R)
apparatus for measurement of Na, 6: 1670
measurement, 6: 275
temperature variation of, nomographs, 6: 254
Ventilation
mercury piston gas pumps for, of animal radiation exposure chambers, 6: 4849
Versene acid
(See Acetic acid, (ethylenediamine)tetra-.)
Vibrations
mathematical analysis of, 6: 2425
measurement, 6: 5830(R)
measuring device for, 6: 4323(P), 4324(P), 4325(P)
orthogonal boundary polynomials in eigenvalue problems, 6: 4571
production, instrument for, 6: 5830(R)
Virial coefficients
low-temperature second, calculation, 6: 4551, 4552
quantum mechanical derivation, 6: 6102
second, of a 6-9 gas at high temperatures, tabulated results, 6: 1491
Virial theorem
period of oscillation of electronic cloud of atom by, 6: 3733(J)
period of oscillation of nucleus by, 6: 3733(J)
for Thomas-Fermi and Thomas-Fermi-Dirac systems, 6: 6658(J)
Virus
effects on uptake of $C^{14}$ from glucose by amino acids in mouse brain, 6: 72(J)
Viruses
biosynthesis of $C^{14}$-labeled tobacco mosaic, 6: 6342(J)
effects of radiation on, 6: 2253(R)
Viscometers
design, 6: 5830(R)
for gases, design of, 6: 3338(R)
Viscosity
(See also as subheading under specific materials.)
determination at high temperature, 6: 6035
determination by capillary flow, 6: 2949(J)
determination from time of fall of radioactive plummet, 6: 4145(R)
temperature dependence, 6: 6031(J)
Vitamin A
effects of radiation on, 6: 4353(R)
Vitamin B
effects of radiation on, 6: 4353(R)
Vitamin $B_1$
synthesis of $C^{14}$-labeled, 6: 4022(J)
Vitamin $B_{12}$
activation by neutron bombardment and biosynthesis of $Co^{60}$-, $P^{32}$-, or $C^{14}$-labeled, 6: 5975(J)
biosynthesis in sheep, 6: 2287(R)
effects of ionizing radiation on, 6: 511(J)
metabolism, tracer studies, 6: 5975(J)
metabolism by ruminants, tracer studies, 6: 5290
therapeutic effects in radiation sickness and tumor toxicity, 6: 55(J)
in therapy of pernicious anemia, 6: 3736
Vitamin D
effects on deposition of Ga in bone, 6: 2838(R)
Vitamins
(For instances of known chemical nature see also as organic compounds.)
effects of radiation on, 6: 2253(R), 4353(R)
effects on glycogen and nitrogen metabolism of liver after irradiation, 6: 1383(J)
radiosensitivity effects of, 6: 2564
therapeutic uses in radiation sickness, 6: 3919(J)
Vitro Corp. of America
progress reports, 6: 830(K), 1184(R), 4764(R), 4765(R), 5579(R)
progress reports on industrial application of fission products, 6: 6497(R)
Volatility separation processes
applied to bromides of W-Ta, 6: 4724(R)
Voltage regulators
(See also Power supplies.)
design, 6: 1575(P)
for electroplating control, design, 6: 1777
Voltmeters
automatic multirange recording, design, 6: 3615
for continuous current, design, 6: 1786(J)
Vosges Mountains (France)
radioactivity and K content of rocks, 6: 3918(J)


## W


Washington Univ.
progress reports, 6: 3827(R)
Waste disposal
(For treatment of radioactive process wastes prior to disposal see Waste processing; see also the subheading waste disposal under specific chemical processes; see also Bacterial slimes; Sewage systems; Stack disposal.)
by discharge into rivers, 6: 6511(R)
effects of atomic energy industries on, 6: 1195(J)
environmental problems of radioactive, lecture on, 6: 1212
of $I^{131}$ by dilution, 6: 883
lecture on, 6: 781
liquid storage, 6: 882(R)
methods for, review, 6: 2355
problems in treatment of radioactive, lecture on, 6: 1213
research programs concerning, 6: 2369(J)
solid storage at Knolls Atomic Power Lab., 6: 1436
survey methods for chemical waste storage pits, 6: 6512(R)
system for, at ANL, 6: 518(J)
Waste processing
(Treatment of radioactive wastes to achieve reduction in volume and decontamination prior to disposal; for recovery of an element from filter cakes, raffinates, salvage wastes, etc., see the subheading recovery under the element; see also Waste disposal.)
by activated sludge process, 6: 4056(R)
by coagulation and carrier precipitation applied to low-level wastes containing Pu, 6: 2906(J)
by evaporation, 6: 1211
by evaporation and incineration, 6: 882(R)
by evaporation, filtration, incineration, and scrubbing, as practiced at Knolls Atomic Power Lab., 6: 1436
by filtration, 6: 1747
by filtration, general layout of BNL sewage disposal plant, 6: 5094
flow sheets for, at ANL, 6: 518(J)
by ion exchange, 6: 1628

Waste processing (cont'd)
by ion exchange, design of lab unit for low activity solutions, 6: 4764(R)
by ion exchange, development of laboratory waste disposal unit for, 6: 6018(R)
by ion exchange, laboratory equipment for, 6: 5579(R)
ion exchange equipment for, testing, 6: 4765(R)
ion exchange unit for, in laboratories, 6: 830(R)
by ion exchange using montmorillonite, 6: 2369
liquid, in pilot plant at ORNL, 6: 5027(J)
for removal of $Ce^{137}$, $Cd^{115}$, $I^{131}$, and $Sr^{90}$, 6: 3182(R)
for removal of Pu, 6: 858(J)
for removal of radioisotopes from water, 6: 54(J)
trickling filter study with urine waste containing $I^{131}$, 6: 4373(R)
Waste solutions
polarographic analysis for biochemical oxygen demand, 6: 6542
Water
(See also Ground waters; Ice; Radioactive waters; Rainwater; Sea water; Steam; Surface waters.)
collision length of non-ionizing penetrating-shower-producing cosmic radiation in, 6: 5131(J)
convection heating and cooling by horizontal cylinders in, 6: 2364(R)
corrosive effects, effects of temperature on, 6: 6046(J)
corrosive effects, effects of velocity on, 6: 6047(J)
corrosive effects of oxygenated and degassed, on nitrided stainless steel, 6: 3780
corrosive effects on materials of construction, 6: 4776(R)
cosmic-ray penetrating showers in, multiplicities of, 6: 6085(J)
decomposition by $\gamma$ and x radiation, 6: 1678
decomposition by $\gamma$ rays, 6: 4006(J)
decomposition by x radiation, 6: 1605(J), 2329, 2332(J)
decontamination, pilot plant at ORNL for, 6: 5027(J)
decontamination, removal of $Sr^{90}$ by phosphate coagulation, 6: 6576
decontamination of radioactive, method for, 6: 1(R), 1610
decontamination using Fe form of National Aluminate cationic resin (HCR-Fe), 6: 1184(R)
determination by Karl Fischer titration in presence of ferric salts, 6: 6540
deuterium exchange between ethanol and, rate of, 6: 6551
diffusion and active transport through amoeba membrane, 6: 2582(J)
diffusion coefficients of vapor in various gases, 6: 4554(J)
effects of radiation on, 6: 556, 1628, 2215(J), 2630(J), 2631(J)
electrolysis of, current density and overpotentials in, 6: 1996
exchange reactions in biological systems, 6: 1981
exchange reactions with hydroxyl radical, 6: 5046(J)
fission product decontamination, ion exchange resins for, 6: 6512(R)
forced-convection heat transfer to, at high pressures and temperatures, 6: 2649
formation and composition of $H_2O_2$ in Po-irradiated, 6: 6569(J)
formation of $H_2O_2$ by $\alpha$ irradiation of, 6: 6328(J)
formation of $H_2O_2$ by irradiation of, 6: 3738
free-radical and atomic reactions in irradiated, 6: 4003(J)
gamma absorption coefficients, experimental and theoretical, 6: 5217(J)
gamma-ray diffusion in, 6: 5218(J)
hydrogen exchange between phosphine and, equilibrium in, 6: 3516
induction of Cherenkov radiation in, by $\beta$ and $\gamma$ radiations, 6: 5509
ions of mass 19 in, 6: 2131(J)
isotopic-dilution determination of total, use of spectroscopy in, 6: 6544(J)
mass transfer by, 6: 2362(R)
metabolism of, 6: 1981
molecular diameters of vapor, 6: 4554(J)
monitor for low-level radioactivity in, 6: 4887(J)
monitoring, 6: 1(R), 277(R)
nutational resonance in distilled, 6: 2473(J)
photolysis by illuminated chloroplast fragments, 6: 567, 2303(J)
photometric analysis for fluoride with Al-hemotoxylin, 6: 6547(J)
radiation stopping by, 6: 5716(R)
radioactivity surveying of steams, 6: 6272(J)
radiological monitoring of, instrument for, 6: 2429
radiological monitoring of White Oak Creek System, 6: 6512(R)
recombination of, for Los Alamos Water Boiler, 6: 2178
removal of $P^{32}$ and $I^{131}$ from, 6: 515
radioisotope removal from, 6: 54(J)
reactions in, produced by $\alpha$-particles, 6: 143(J)
reactions in, produced by ionizing radiation, 6: 144(J)
secondary-electron spectra produced by $Co^{60}$ $\gamma$ rays in, 6: 4244(J)
self-diffusion coefficients in, 6: 3977(J)
slowing down distribution of neutrons in, 6: 4181
solubility in liquid phosphorus, 6: 2298
spectra of flames of, with fluorine, 6: 2032(J)
spectrophotometric analysis for microgram amounts of Th, 6: 6546(J)
thermo-osmosis of vapor through rubber, 6: 1776(J)
viscosity, temperature dependence of, 6: 6031(J)
viscosity at 20°C, absolute, 6: 2949(J)
Water (cont'd)
x-ray absorption by, 6: 392(J)
Zeeman effect in, 6: 5789(R)
Water-d
mass spectrometric determination of $HOD^+$ ion in, 6: 2131(J)
Zeeman effect in, 6: 5789(R)
Water-$d_2$
determination in $H_2O$, by float method, 6: 4740(J), 4741(J)
diffusion coefficients of vapor in air, 6: 4554(J)
electrolysis of, automatic apparatus for, 6: 828(J)
infrared spectra, 6: 3135(J)
infrared spectra of amino acids in, 6: 3982(J)
isomerization of D-glucose in, 6: 2023(J)
mass spectrographic analysis, 6: 547
microwave absorption spectra and atomic energy levels, 6: 6317(J)
mobility of D ions in, 6: 5058(J)
molecular diameters of vapor, 6: 4554(J)
self-diffusion coefficients in, 6: 3977(J)
stopping cross section of frozen, for protons and deuterons, 6: 5500(J)
Zeeman effect in, 6: 5789(R)
Water-$t_2$
preparation, 6: 5710
toxicity to mice, 6: 1979(J)
triple point temperature of, 6: 5710
Water purification equipment
evaluation of, for removal of fission products, 6: 6512(R)
Water–sodium chloride systems
phase studies and electric conductivity, 6: 2678(R)
Water supplies
(Including plants, sources, distribution, storage, etc.)
analysis for Ra, 6: 510(R)
effects of atomic energy industries on, 6: 1195(J)
Water vapor
radiation stopping by, 6: 5716(R)
Wear
of plastics, tracer studies, 6: 4054(J)
Welch, W. M., Manufacturing Co.
progress reports, 6: 4868(R)
Welding
(Including gas, diffusion, arc, and resistance welding; see also specific materials and fabricated units, and subheading welding where provided.)
electrodes for thick plates and pressure vessels, 6: 6021(J)
impulse-type resistance welder, design, 6: 2695
laboratory unit for resistance, 6: 181
Welds
on stainless steel, effect of composition and microstructure on, 6: 6068
Well logging
application to porosity determinations in limestone, 6: 5372(J)
calibration of diamond-drill-hole logging devices, 6: 1459
combination $\gamma$-ray-induced, 6: 2372(J)
gamma and neutron, simultaneous, 6: 4063(J)
neutron, in petroleum prospecting, theory of, 6: 2101(J)
West Point Claim (Colorado)
prospecting for U, 6: 1456
West Stands Reactor
construction and operating details, 6: 353
Wetting
contact angle measurements in Hg systems, 6: 6067(R)
detection and measurement of, instrument for, 6: 5601
effects of temperature and oxidation on, 6: 5601
of metals of Groups I and VIII by sodium silicates, 6: 4780
Wheat
cytogenetics of x-ray-induced reciprocal translocations in, 6: 2820(J)
induction of a dominant chlorophyll mutant by exposure of seed during an atomic bomb explosion, 6: 6265(J)
White Oak Creek system
ecology of, 6: 1(R), 4373(R), 6512(R)
fish in, size of, 6: 11
fish population estimate in, 6: 2248, 5251
radiological monitoring and ecological survey, 6: 3182(R)
White Signal District (New Mexico)
exploration for U, 6: 1457
Willgerodt reaction
functional group migration in alkyl ketones, 6: 5300
labile intermediate participating in, with valerophenone, 6: 5355
William H. Chandler Lab., Lehigh Univ.
progress reports, 6: 5349(R)
Wind
velocity, raw data on, 6: 1520(R)
velocity and gusts, variation with height, 6: 6431
velocity measurement, 6: 1516(R), 1517(R), 1518(R), 1519(R)
Wind River District (Wyo.)
reconnaissance for uraniferous rocks, 6: 6056

Wind tunnels
for calibrating micrometeorological instruments, construction and operation of, 6: 3041(R)
for calibrating micrometeorological instruments, design of, 6: 1519(R)
design and operation at NYO, 6: 3829
for meteorological studies, design, 6: 677(R)
simulation of atmospheric conditions in, turbulence studies useful for, 6: 3828(R)
Wood
corrosion by $H_2O_2$, 6: 240(J)
gamma scattering by, spectral distribution of, 6: 6621(R)
technology and age determination, application of tracer techniques to, 6: 5092(J)
Wyoming (Sweetwater Co.)
airborne radioactivity survey of, 6: 589
Wyoming Univ.
progress reports, 6: 3052(R), 5183(R), 5459(R)

## X

X radiation
(See also Gamma radiation; Photons.)
absorption by atoms in molecules, 6: 138(J)
absorption by glass calculated from absorption coefficients of components of glass, 6: 6698(J)
absorption of 2-Mev, by concrete, Pb, Cu, and Al, 6: 3430(J)
from americium ($Am^{241}$) and $Np^{237}$, 6: 413
anomalous transparency of thick crystals to, 6: 2411
biological effectiveness of 200-kv and betatron 23.5-Mev, using leukopenia as biological indicator, 6: 5722(J)
biological effects, 6: 2888(J)
biological effects, compared to radon, 6: 763
biological effects, compared with effects of $\alpha$ particles, 6: 4687
biological effects, review of, 6: 783(J)
biological effects and lethal dosage determinations for albino Swiss mice, 6: 6498
blood coagulation by spleen irradiation with, 6: 2821(J)
chemical effects on aqueous chlorobenzene, 6: 2046(J)
chemical effects on aqueous phenol, 6: 2045(J)
chemical effects on nitrogen mustards, 6: 1680(J)
chemical effects on solutions, 6: 1605(J)
chemical effects on water, 6: 144(J), 1678
critical absorption energies for, for $\gamma$-energy determinations, 6: 2529
decomposition of $H_2O_2$ by, 6: 2332(J)
depth-dose data at 30-100 kv, 6: 5958(J)
detection and measurement, 6: 59(R), 650(R)
detection and measurement of secondary radiation from, 6: 6271(J)
detection by various phosphors, 6: 403(R)
diffusion in infinite medium, calculation of, 6: 2515(J)
dosage determinations and mortality effects on mice, 6: 3162(J)
dosage determinations and pathological effects in patients undergoing oral roentgenography, 6: 5950
dosage determinations of, 6: 668(J)
dosage determinations of, using dental film, 6: 1613(J)
dosage distributions in patients treated with, 6: 2827(J)
dosage received during diagnostic radiography, determination, 6: 1100(J), 6275(J)
dosimetry with crystalline solids, 6: 5153(J)
effects of hypothermia on survival of infant mice given lethal doses of, 6: 3153
effects of single and periodic doses on growth of rats, 6: 6243
effects of total-body, on adrenal ascorbic acid concentration in rats, 6: 1956(J)
effects of total-body, on rat intestine and intestinal nucleoprotein, 6: 1957(J), 2558
effects of total-body exposure to, on fertility of male rabbits, 6: 4706(J)
effects on antibody formation, 6: 1375, 5257
effects on antihemophilic activity in dogs, 6: 6245(J)
effects on aqueous $NH_3$, 6: 6327(J)
effects on aqueous ferrous-ferric system, 6: 2630(J)
effects on Ascaridia galli eggs, 6: 4367(J)
effects on bacteria, 6: 29, 47
effects on bacteria, bibliography, 6: 1377
effects on barley seed, 6: 41(J), 5262
effects on bone healing, 6: 3169(J)
effects on cell division in amoeba, 6: 6244
effects on cells, chemical modification of, 6: 49
effects on chromosomes, 6: 24, 26
effects on cytochemistry of gastro-intestinal tract, 6: 6242
effects on dilute aqueous solutions of oxidizing and reducing agents, 6: 2329
effects on Drosophila eggs, 6: 2266(J)
effects on egg yolks, 6: 508
X radiation (cont'd)
effects on electrolyte retention in muscle, 6: 1077
effects on enzymatic activity, 6: 3899(J)
effects on enzyme systems in mouse spleen, 6: 6247(J)
effects on enzymes, 6: 40(J)
effects on erythrocytes, 6: 778(J)
effects on fetal development, case history, 6: 5015(J)
effects on fibrinogen, 6: 30
effects on frog heart, 6: 3166(J)
effects on function of thyroid gland in rats, 6: 2258(J)
effects on gastro-intestinal transit and absorption availability, 6: 37
effects on growth and peripheral blood-cell levels of albino rat, 6: 5272(J)
effects on halohydrocarbon solutions, 6: 1169(J)
effects on hands exposed during oral radiography, 6: 6254(J)
effects on hematopoietic cells, 6: 36
effects on hematopoietic system, life span and reproductive system of reptiles, 6: 1090(J)
effects on kinetics of thermal denaturation of egg albumin, 6: 4369(J)
effects on metabolism in liver, 6: 56(J)
effects on metastasis of a transplantable mouse mammary carcinoma, 6: 6256(J)
effects on mitotic activity and nuclear fragmentation of lens epithelium in normal and cysteine-treated rabbits, 6: 2816(J)
effects on mortality rates and clinical and blood pictures of guinea pigs, 6: 6502(J)
effects on N balance, 6: 5265
effects on nuclear emulsions, 6: 311(J)
effects on nucleic acid metabolism, 6: 3168(J)
effects on organic compounds, bibliography, 6: 6008
effects on pancreatic secretion, 6: 3904(J)
effects on paramecium, 6: 46, 48, 140
effects on photographic film, 6: 730(J), 1681(J)
effects on plasmin inhibitor titer in blood plasma, 6: 2561
effects on polysaccharide and sulfhydryl levels in blood plasma, 6: 1594
effects on pupa development in Drosophila, 6: 2265(J)
effects on rats, 6: 50
effects on regeneration of nerves of salamander limbs, 6: 3496(J)
effects on respiration in E coli., 6: 1079
effects on seed, 6: 32
effects on skin, as modified by metabolic level and temperature, 6: 1958(J)
effects on subsequent fertility of fetuses of mice, 6: 5947(J)
effects on susceptibility of mice to C. septicum toxin, 6: 6240
effects on susceptibility of mice to influenza virus infection, 6: 2811(J)
effects on thymocytes, modification by cysteine, 6: 3487
effects on thyroid glands, 6: 31
effects on uptake of methionine $S^{35}$ into proteins of rat sarcoma cells, 6: 4704(J)
effects on viability of Drosophila, 6: 1951(J)
effects on weight changes and water consumption of rats, 6: 5010
effects on wheat roots, 6: 44(J)
fragmentation of chromosomes by, during mitosis, 6: 2250
genetic effects, 6: 1954(J)
genetic effects on Drosophila, 6: 773(J)
genetic effects on fungi, mechanism, 6: 1948
genetic effects on women receiving pelvic irradiation, case histories, 6: 6260(J)
genetic, metabolic, and physiological effects of, 6: 506(R)
glass for absorption of, 6: 6470(J)
graying of hair in mice by, 6: 2570(J)
growth retardation of bones by, 6: 3167(J)
half-value layer and dosage determinations, by successive approximations, 6: 4346(J)
half-value-thickness of 200-kv, in Cu, 6: 6704(J)
hematological effects on guinea pigs, 6: 1953(J)
high-voltage, comparison with Ra $\gamma$ rays, 6: 4807(J)
indirect effects in production of mutations in Drosophila, 6: 6266(J)
indirect effects on wall of developing mesencephalon of chick embryo, 6: 5274(J)
induction of cataracts by, effects of cysteine treatment on, 6: 2270(J)
induction of cataracts by, in newborn mice, 6: 1952(J)
induction of cataracts by, protective effects of chemicals against, 6: 4358(J)
induction of dominant lethals by, in mice, 6: 45
induction of lethal recessive factors by, 6: 769(J)
late effects on normal mouth tissues, 6: 2819(J)
lens opacities produced by, in mice, 6: 5275(J)
lethal dosage determinations of, compared with $\alpha$ particles, 6: 1607(J)
lethal dosage determinations of, for mice, 6: 506(R)
lethal dosage of, as affected by prolonged exposure to low environmental temperature, 6: 4372
lethal effects, mechanism of, 6: 1948, 1964, 3176(J)
lethal effects, modification with pharmaceuticals, 6: 6515
lethal effects, as modified by shielding of intestine of rabbits, 6: 1083

X radiation (cont'd)
lethal effects on obese and normal mice, ⊙: 6251(J)
lymphoid tumors induced by, effects of dosage, number of treatments, and intervals between treatments on incidence of, ⊙: 3179(J)
lymphoid tumors induced by total-body, in mice, ⊙: 6282(J)
mitotic effects on grasshopper neuroblasts, ⊙: 2249
mitotic effects on roots, ⊙: 39(J)
monitoring and yield integrating of, from betatron, ⊙: 1798
morphological and hematological effects in parabiotic rats, ⊙: 3893
multiple small-angle scattering of, theory, ⊙: 2516(J)
mutants of bacteria produced by, ⊙: 6258(J)
mutation rates induced by, modification in Aspergillus terreus, ⊙: 4368(J)
mutations induced by, in Drosophila, ⊙: 770(J)
neutrocytes with karyoschisis induced by, in guinea pig, ⊙: 3903(J)
oxidation and reduction produced by, ⊙: 146(J), 2215(J)
oxidation of arsenite in aqueous solution by, ⊙: 837(J)
oxidation of $FeSO_4$ solutions by, effect of alcohols on, ⊙: 6568(J)
pathogenic effects in dental radiography, ⊙: 6273(J)
pathological and physiological effects, ⊙: 5716(R)
pathological effects on developing fetuses of mice, ⊙: 6494
pathological effects on mice, ⊙: 2256
pathological effects on pigs, ⊙: 1950
pathological effects on tissues of mouth, salivary glands, and developing teeth, ⊙: 2254
penetration, approximate computations of, ⊙: 3706
penetration through skin, ⊙: 4362(J)
permissible limits for vaginal wall, ⊙: 6503(J)
permissible limits in therapy, ⊙: 42(J)
physiological effects, studied in respiration and development of irradiated eggs and sperm of sea urchin, ⊙: 1084
physiological effects of grenz-ray, ⊙: 2264(J)
physiological effects on dogs, ⊙: 516(R)
potential hazards from widespread use in pediatrics, ⊙: 2823
proportional counter for soft, ⊙: 309(J)
protection against, by ethanol, ethyl carbamate, cysteine, and nembutal, ⊙: 1386(J)
protection against, by lead glass fabric, ⊙: 1961(J)
protection against, by methylamine, ⊙: 1385(J)
reciprocal translocations in wheat induced by, ⊙: 2820(J)
reduction of ceric sulfate solutions by, ⊙: 2628(J)
relation between electron current and intensity of, in high energy electron accelerators, ⊙: 1027
relative effects of 50-kev, 180-kev, and 31-Mev x radiation on development of Drosophila pupae, ⊙: 6509(J)
safety factor for, ⊙: 4362(J)
scattering, film-badge detection of, ⊙: 3006(J)
scattering, mathematical analysis, ⊙: 4138
scattering by alloys, atomic size effect in, ⊙: 2210(J)
scattering by liquids, ⊙: 726(J)
scattering by N, ⊙: 400(J)
scattering measurement with 2- and 3-crystal spectrometers, ⊙: 4119
spatial distribution, calculation by semi-asymptotic methods, ⊙: 5147
suppression of the tuberculin reaction in rabbits by total body, ⊙: 6261(J)
survey of personnel exposures to, in hospitals and clinics, ⊙: 779
synergistic effects of simultaneous systemic and local, on lymphosarcoma, ⊙: 1082
tissue absorption, by exit-dose, ⊙: 5269(J)
tissue depth-dose measurement, scintillation detector for, ⊙: 5429
units, energy, and dose, ⊙: 5219(J)
vasotropic substance in blood of animals after exposure to whole-body, identification, ⊙: 6255(J)
wavelength of, at a depth in water, ⊙: 392(J)
weight pattern in mice following, ⊙: 3173(J)
X-ray absorption analysis
(See also as subheading under specific materials.)
technique, precision, and equipment, ⊙: 5314
X-ray beams
absorption, effect on x-ray spectrometer measurements, ⊙: 3857
energy distribution in, equations for, ⊙: 6692
produced by electrons, bibliography, ⊙: 5892(J)
X-ray cameras
preselecting back-reflection microbeam, ⊙: 6116
X-ray-diffraction analysis
(See also as a subheading under specific materials.)
application to evaluating radiation damage in materials, ⊙: 5504
camera for, design, ⊙: 3810(J)
device for use in, for coarse-grained or single crystalline materials, ⊙: 2314
films for, ⊙: 971(J)
Fourier coefficients in, interpretation of, ⊙: 2208(J)
at low temperatures, equipment for, ⊙: 617
X-ray-diffraction analysis (cont'd)
machine methods for processing data from, ⊙: 2993(R)
of metal powders, extinction effects in, ⊙: 2675
relation of Laue asterism and deformation bands, ⊙: 6313(J)
scattering factors for B, Be, C, F, H, He, Li, N and Ne, calculation of ⊙: 1347(J)
separation of cold work distortion and particle size broadening in, theory, ⊙: 6389
study of cold-worked Al by microbeam technique, ⊙: 4080(J)
in thickness measurements of metal coated cylinders, ⊙: 1486
x-ray absorption corrections for single crystals, ⊙: 4805(J)
x-ray spectrogoniometer for recording x-ray-diffraction patterns, ⊙: 4560
X-ray emission
(See as subheading under specific materials.)
X-ray equipment
(See also Radiography; X radiation; X-ray-diffraction analysis.)
alignment, ⊙: 62
attachments for use in tomographic photography, ⊙: 785(J)
design, ⊙: 1(R)
design and operation, ⊙: 403(R)
design and performance, ⊙: 59(R)
design for study of pulse decay characteristics of phosphors, ⊙: 6409
ionization chambers for soft-x-ray dosimetry, ⊙: 4878(J)
measurement of Cu half-value-thickness of oil-insulated 200-kv, ⊙: 6704(J)
monitoring, ⊙: 3501(J)
X-ray microscopy
application to the study of deformed metals, ⊙: 1250(J)
X-ray monochromators
design for low-angle x-ray-diffraction studies, ⊙: 3805
X-ray shielding
design, ⊙: 1582(P)
protective effect of, during repeated whole-body irradiation of rat, ⊙: 2817(J)
techniques for, during x-ray examination of the chest, ⊙: 5021
X-ray spectra
energy-distribution diagrams, false impression given by, ⊙: 4807(J)
energy levels of elements from Yb to U calculated from, ⊙: 3449(J)
fine structure in, ⊙: 3069(J)
line widths in, ⊙: 1262(J)
line widths in, effect of nuclear magnetic moments on, ⊙: 2478(J)
measurement of, of synchrotrons, ⊙: 1028
from 70-Mev synchrotron, ⊙: 6178(J)
X-ray spectrometers
(See also the subheading detection and measurement under X-radiation.)
crystal, design, ⊙: 4119
design and performance, ⊙: 5639(R)
Geiger-counter, influence of the apparatus function on line-breadth measurements with, ⊙: 5413(J)
measurements with, effect of low absorption coefficient on, ⊙: 3857
Xanthates
adsorption on mineral surfaces, ⊙: 1628
adsorption on pyrite, ⊙: 2073(R)
Xanthopterin
synthesis of $C^{14}$-labeled, ⊙: 4455(J)
Xenon
collision probability for slow electrons in, ⊙: 1490
diffusion, ⊙: 4112
diffusion coefficients in, ⊙: 4565(J)
fluorescence, ⊙: 409
liquid-vapor coexistence curves in region of critical temperature, ⊙: 4116(J)
neutron scattering cross sections, ⊙: 679
Xenon isotopes
from fission, radioactivity of, ⊙: 1839
identification of $Xe^{121}$, $Xe^{122}$, and $Xe^{123}$, following proton bombardment of I, ⊙: 5875(R)
Xenon isotopes $Xe^{129}$
decay scheme of isomeric, ⊙: 3116(J)
Xenon isotopes $Xe^{130}$
energy levels, ⊙: 5518(J)
Xenon isotopes $Xe^{131}$
energy levels, from $I^{131}$ $\beta$ decay, ⊙: 436(J), 3723(J)
gamma emission by, ⊙: 2714(J)
half lives, ⊙: 1839
half lives of excited states of, ⊙: 426(J)
internal conversion, ⊙: 422(J)
isomeric magnetic dipole transitions in, ⊙: 335
Xylene
absorption and fluorescence spectra, ⊙: 1929
fluorescence of, $\alpha$- or $\gamma$-induced, ⊙: 653(R)
fluorescence of $\alpha$-irradiated, effects of terphenyl on, ⊙: 5505(J)
fluorescence of $\alpha$-irradiated, mechanism, ⊙: 5506(J)

Xylene (cont'd)
luminescence of γ-irradiated, 6: 4750(J)
d-Xylose (labeled)
synthesis from glucose, 6: 172(J)

## Y

Yale Univ.
progress reports, 6: 3762(R), 3895(R), 5754(R)
Yeasts
amperometric analysis for sulfhydryl compounds, 6: 2605
biosynthesis of arginine by, 6: 794
biosynthesis of $S^{35}$-labeled, 6: 4462(J)
biosynthesis of thiomethyladenosine by, 6: 5532, 5533
effects of pH on radiosensitivity of, 6: 4357(R)
effects of radiation on growth of, 6: 2559(R)
effects of visible light on sulfhydryl content of, after ionizing and ultraviolet irradiation, 6: 2605
genetic factors producing a triploid strain of, 6: 1591
lethal effects of ultraviolet radiation and photo-reactiviation on, 6: 10
metabolism of, effects of x radiation on, 6: 506(R), 510(R)
metabolism of, studied by synthesis of adenine thiomethylriboside, 6: 1072
mitochondria in nuclei of, disruption by ultraviolet radiation, 6: 4354
nuclear cytology of Eremascus albus, 6: 5249
relation of polyploidy to radiation response as determined by analysis of ultraviolet survival curves, 6: 4356
role of the nucleus in x-ray-induced deferred death in, 6: 2810
Ytterbium
hyperfine structure in spectra of, 6: 6451(J)
preparation by reduction of chloride or fluoride with Ca in Ta container, 6: 3763
Ytterbium borides
paramagnetic properties of $YbB_6$, 6: 4993(J)
Ytterbium chlorides
activity coefficients in aqueous solutions, 6: 558
electric conductivity and activity coefficients in aqueous solution, 6: 2870(J)
transference number, 6: 563
Ytterbium compounds
ferrates(III), with two ferromagnetic Curie points, 6: 5582(J)
Ytterbium isotopes
isomeric transition, 6: 409
isotope shift constants from hfs, 6: 6451(J)
Ytterbium isotopes $Yb^{170}$
internal-conversion coefficients, 6: 1555, 2223(J)
Ytterbium silicides
preparation and crystal structure, 6: 2335(J)
deposition in bone, 6: 70
Yttrium
deposition in bone, effect of salts of (ethylenediamine)tetraacetic acid on, 6: 5951
distribution and excretion in rats, effects of salts of Zr and other metals on, 6: 3206(J)
excretion following administration of Ca (ethylenediamine)tetraacetic acid and Fe-3 chelating agents, 6: 2809
preparation by Ca reduction of chlorides, 6: 1171, 3763
proton reactions at high energies, 6: 5875(R)
purification by precipitation with Na nitrite, effect of pH on, 6: 5755(J)
solvent extraction with TBP, 6: 2632
volatilization rate in He d-c arc spectroscopy, 6: 2607(J)
x-ray spectra, 6: 97(J)
Yttrium chlorides
crystal structure of $YCl_3$, 6: 5745, 5791
Yttrium compounds
ferrates(III), with two ferromagnetic Curie points, 6: 5582(J)
Yttrium isotopes
identification of $Y^{83}$ and $Y^{83}$, following proton bombardment of Y, 6: 5875(R)
radioactivity, 6: 3110(J)
Yttrium isotopes $Y^{87}$
beta emission, configuration forbiddenness in, 6: 5521(J)
Yttrium isotopes $Y^{90}$
beta-ray energy in mixture $Sr^{90}$-$Y^{90}$, 6: 6718(J)
beta spectra, 6: 735
beta spectra, maximum energy, 6: 5706(J)
beta spectra, measurement, 6: 3114(J), 3119(J)
disintegration of, average β energy per, 6: 3439(J)
gamma spectrum, measurement of, 6: 3119(J)
Yttrium isotopes $Y^{91}$
beta spectra, maximum energy, 6: 5706(J)
bone deposition, 6: 5278
excretion, effects of salts of (ethylenediamine)tetraacetic acid on, 6: 6278
Yttrium oxide–zirconium oxide systems
phase studies up to 2000°C, 6: 209(J)
Yttrium oxides
dielectric properties, 6: 2075(J)
Yttrium silicides
preparation and crystal structure, 6: 2335(J)

## Z

Zeeman Lab., Amsterdam
research programs in spectroscopy and nuclear physics, 6: 1371
Zeta particles
in nuclear disintegrations, properties of, 6: 2728(J)
Zinc
corrosion, marine, 6: 5100(J)
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
corrosion inhibitors for, 6: 3567
diffusion in Cu, 6: 5109(R)
electrolytic separation from U, 6: 90(R)
gamma reactions, 6: 2585
grain-boundary diffusion in Cu, 6: 6532
magnetic susceptibility showing the de Haas-van Alphen effect, 6: 2945
proton reactions with, 6: 2107
spallation products of proton-bombarded, 6: 1864
spectrophotometric analysis, 6: 597(R)
stationary potential of spontaneous acid dissolution, 6: 4495(J)
Zinc acetates
isotopic exchange reactions with Zn chelates, 6: 5047(J)
Zinc–aluminum alloys
atomic structure and thermodynamic properties, 6: 5107(R)
Zinc–aluminum–magnesium alloys
corrosion, marine, 6: 5100(J)
corrosion, mechanism of, 6: 248(J)
photometric analysis for Al, 6: 1139
Zinc carbonates
dissociation, free energy change for, 6: 3959(R)
Zinc chelates
isotopic exchange reactions with Zn acetate, 6: 5047(J)
Zinc coatings
for corrosion protection of Al and Al alloys, 6: 6354(J)
Zinc complexes
chemical properties, 6: 4724(R)
dissociation in aqueous solutions, 6: 564(J)
with 2-methyl-8-quinolinol, stability of, 6: 1141(J)
preparation, dissociation constants, and molar absorbancy indexes of, 6: 157
with thiocyanate, polarographic study, 6: 5311(R)
with tropolone and tropolone-derivative, formation constants of, 6: 6534
Zinc–copper alloys
diffusion in, 6: 603(R)
grain boundary diffusion in, 6: 1473(R)
Zinc–copper couples
diffusion of Zn in, 6: 601(R)
Zinc–copper–nickel alloys
casting, corrosion, and physical properties of, 6: 1465
Zinc ferrates
crystal structure and magnetic properties, neutron diffraction studies of, 6: 6388
Zinc fluorides
crystal structure, 6: 2295
preparation, density, and melting point, 6: 2295
Zinc–iron alloys
corrosion by various salt, acid, and $H_2O_2$ solutions, 6: 2076(J)
Zinc isotopes
concentration of light, by electrolytic migration in molten $ZnBr_2$, 6: 6401(J)
nuclear energy levels of $Zn^{65}$, $Zn^{67}$, and $Zn^{69}$, 6: 5513(J)
Szilard-Chalmers concentration, 6: 4017(J)
K capture and $\beta^+$ spectrum, branching ratio, 6: 6195(J)
Zinc isotopes $Zn^{64}$
gamma absorption cross sections, 6: 1326
gamma cross sections, 6: 364
gamma reactions (γ,n), 6: 1871(J)
neutron reactions (n,α), 6: 3847(J)
packing-fraction differences involving, mass-spectrographic measurement of, 6: 2991
photon reactions (γ,n), (γ,pn), (γ,2np) of, relative cross sections, 6: 3078(J)
Zinc isotopes $Zn^{65}$
branching ratio of K capture to positron emission, 6: 427(J), 6195(J)
decay by K capture, 6: 1353(J)
disintegration, 6: 3114(J)
K capture and positron emission in, measurement, 6: 4990(J)
Zinc isotopes $Zn^{66}$
energy levels and nuclear spin of, 6: 1015(J)
neutron reactions (n,α), cross sections for slow, 6: 6687(J)

Zinc isotopes $Zn^{68}$ (cont'd)
packing-fraction differences involving, mass-spectrographic measurement of, 6: 2991
Zinc isotopes $Zn^{67}$
neutron reactions (n,α), cross sections for slow, 6: 6687(J)
nuclear magnetic moment and spin, 6: 3062(J)
Zinc isotopes $Zn^{68}$
neutron reactions (n,α), cross sections for slow, 6: 6687(J)
Zinc nitrates
distribution between water and 1-hexanol, 6: 102
solubility in benzene and hexanol, effects of impurities on, 6: 83
Zinc oxides
recrystallization and sintering, mechanism of, 6: 117
solubility, 6: 3959(R)
solubility, effect of pH on, 6: 597(R)
thermal conductivity, 6: 204
Zinc single crystals
creep mechanism in, 6: 1733
creep rate, effect of stress on, 6: 6065
growth from melt, effect of thermal factors on, 6: 5786(J)
plastic deformation, 6: 1470(R)
plastic deformation, recovery factors in, 6: 6064
plastic properties, effect of annealing procedures on, 6: 6063
recrystallization, 6: 618(R), 4795(R)
Zinc sulfates
measurement of electrical conductivity of, under high field excitation, 6: 3747
Zinc sulfides
luminescence spectra of x-ray-activated, 6: 3634(J)
phosphors, deposition from alcohol dispersions, 6: 3353
Zircon
(See also Zirconium silicates.)
gravimetric analysis for Zr, 6: 113(J)
thermal conductivity of, measurement by ellipsoid envelope method, 6: 2918
Zirconia District (North Carolina)
pegmatite minerals of rare-earth type in, 6: 4496
Zirconium
activation determination in Zr-Hf mixtures, 6: 5317(J)
analysis, 6: 1737(R)
analytic reagents for, 6: 2014(J)
annealing and rolling of electrolytically produced, 6: 4752(R)
anodizing, 6: 225
arc melting, 6: 3578(J)
bibliographies, 6: 2089
casting, 6: 223(R), 2384(J)
cathodic sputtering, 6: 252
chemical determination in urine salts, 6: 6538
chemical properties, 6: 2004(J)
chemical properties, review, 6: 99(J)
colorimetric spot test determination, 6: 6307(J)
combustion analysis for C, 6: 592
corrosion, 6: 223(R), 2920(R), 2921(R), 4399, 4777(R)
corrosion by $H_3PO_4$ aerated with He and by Ca and Na hypochlorite, 6: 1236
corrosion resistance in aqueous inorganic chlorides, 6: 6048(J)
corrosion resistance in mineral acids, 6: 6049(J)
crystal structure of, effects $O_2$ and $N_2$ on, 6: 229(R)
determination by precipitation with benzilic acid, 6: 823(J)
determination by precipitation with cinnamic acid, 6: 1146(J)
determination by selenite method, 6: 1636
deuteron range-energy relation in, 6: 1032
diffusion of N in, 6: 898
effects on Pu and Y distribution and excretion in rats, 6: 3206(J)
electric conductivity, 6: 3286
electrochemical corrosion, 6: 597(R), 4777(R)
electrodeposition from fused salts, 6: 1173(R)
electrolysis, 6: 597(R)
electroplating with Ni and Fe, 6: 2670
extraction with various β diketones, 6: 4015
friction coefficients and surface damage of, 6: 2672
furnacing, 6: 2384(J)
grain structure, 6: 5610(R)
gravimetric determination in Ti and Ti alloys by the mandelic acid method, 6: 3523
gravimetric determination in zircon, 6: 113(J)
gravimetric determination in $ZrF_4$, effect of fluoride on, 6: 5307
hyperfine structure in spectrum of, 6: 3839(J)
ion exchange properties, 6: 86, 1636
ion-exchange separation from Th and Ti, 6: 2343(J)
ion exchange studies on, 6: 2860
lattice constants, density, and hardness, effects of small additions of $O_2$ on, 6: 2934
Zirconium (cont'd)
mechanical properties at high temperatures, 6: 2930
melting, 6: 223(R), 5610(R)
melting, furnace for, 6: 3791
metallography of, with polarized light, 6: 1228
metallurgical properties, 6: 6364(R)
microstructure, 6: 3286
occurrence, 6: 2004(J)
oxidation, effect of water vapor on, 6: 2376
phase studies, 6: 1475(R), 3286, 5379(R)
physical and mechanical properties of high-purity, 6: 2929
physical properties of electrolytically produced, 6: 4752(R)
physical properties of iodide refined and crude, 6: 1241(J)
polarization potential, 6: 3959(R)
preparation, 6: 223(R), 2004(J), 3286
production by electrolysis of $K_2ZrF_6$, 6: 6364(R)
production by fused salt electrolysis, 6: 236(R), 1737(R), 4752(R)
properties affecting alloying, 6: 6057
purification by sulfate precipitation, 6: 4443(J)
recrystallization and transformation textures of rolled crystal-bar, 6: 3791
as a reducing agent, 6: 2081
removal of embrittling gases from, 6: 3576(J)
separation from Hf, 6: 99(J), 844(J), 1175(J), 2004(J)
sheath working of, up to 1700°F, 6: 3579(J)
solution chemistry of, in $HNO_3$, $HClO_4$, HCl and $H_2SO_4$, 6: 2860
specific heat between 1.8 and 4.2°K, 6: 5620(J)
spectrographic determination, 6: 1144(J)
spectrophotometric analysis for traces of Fe and Ti using tiron, 6: 1656
spectrophotometric analysis of metal and compounds of, for Fe, 6: 2012
spectrophotometric determination, 6: 2612(J)
spectrophotometric determination in Mg–Zr alloys, 6: 6310(J)
superconducting properties below 1°K, 6: 6317
surface preparation for brazing, 6: 5377
surface reaction with N, 6: 898
surface reaction with $O_2$, 6: 2378
tensile properties, 6: 1475(R), 3791, 5610(R)
thermal analysis, 6: 3286
uses in reactors, 6: 5787(J)
vacuum fusion analysis for $O_2$, $N_2$, and $H_2$, 6: 3254(J)
volatilization rate in He d-c arc spectroscopy, 6: 2607(J)
x-ray spectra, 6: 97(J)
Zirconium alcoholates
preparation, 6: 5081(J)
preparation and boiling points, 6: 5080(J)
Zirconium alloys
with aluminum, Cr, Cu, Mg, Mo, Si, Sn, W, constitution diagrams, 6: 591(R)
constitution and phase transformations, 6: 6057
constitution diagrams, 6: 4505(R)
corrosion, 6: 2920(R), 2921(R)
corrosion by rocket fuels, 6: 1236
crystal structure, 6: 4505(R)
tensile properties, 6: 5610(R)
Zirconium aluminides
x-ray-diffraction analysis, 6: 4560
Zirconium–aluminum alloys
casting and forging properties of superduraluminum containing Zr, 6: 6074(J)
constitution diagrams, 6: 4505(R)
Zirconium borides
crystal structure and properties, 6: 120
crystal structure and properties of $ZrB_{12}$, 6: 3793(J)
preparation and physical properties, 6: 4408(J)
Zirconium borohydrides
preparation, 6: 467(P)
Zirconium carbide–niobium carbide–vanadium carbide systems
solubility relationships in, 6: 2074
Zirconium carbide–tantalum carbide–vanadium carbide systems
solubility relationships in, 6: 2074
Zirconium carbide–titanium carbide–vanadium carbide systems
solubility relationships in, 6: 2074
Zirconium carbides
preparation, melting point, and crystal structure, 6: 3566(J)
Zirconium chloride complexes
decomposition under reduced pressure, 6: 2342
Zirconium(IV) chloride complexes
thermal decomposition, 6: 1636
Zirconium chlorides
compounds with alkyl benzoates, heats of formation of, 6: 1396(J)
reactions with phosphorus oxyhalogens, 6: 1636
Zirconium(IV) chlorides
dissociation of, production of Zr metal by, 6: 223(R)

Zirconium(IV) chlorides (cont'd)
preparation, purification, and handling of, 6: 275
production, 6: 4409(J)
vapor pressure of, by molecular effusion, 6: 275
Zirconium–chromium alloys
constitution diagrams, 6: 2098(J), 4505(R)
Zirconium complexes
preparation, 6: 157
pyridinium, preparation, 6: 5081(J)
Zirconium compounds
organic, preparation and properties of, 6: 1636
Zirconium–copper alloys
constitution diagrams, 6: 4505(R)
Zirconium films
preparation and properties, 6: 4399
Zirconium fluorides
gravimetric analysis for Zr, effect of fluoride on, 6: 5307
Zirconium(IV) fluorides
density and optical properties, 6: 2640(R)
preparation by hydrofluorination of $ZrO_2$ followed by vacuum sublimation, 6: 2640(R)
preparation of high purity, 6: 2617(R)
production by reaction between $ZrCl_4$ and HF, 6: 6213(P)
Zirconium foils
preparation for corrosion testing, 6: 234, 2376
Zirconium–hafnium alloys
activation analysis for Zr, 6: 5317
constitution diagram, 6: 2865(J)
superconductivity, 6: 6624(R)
Zirconium hydride–zirconium oxide systems
phase studies, 6: 5097(R)
Zirconium hydrides
explosive limits, 6: 1627
preparation, 6: 2004(J)
Zirconium iodides
physical properties, 6: 229(R)
Zirconium(IV) iodides
dissociation of, production of Zr metal by, 6: 223(R)
preparation, 6: 223(R)
Zirconium isotopes
mass, 6: 3054
radioactivity, 6: 3110(J)
yields in $U^{235}$ fission, 6: 1327(J)
Zirconium isotopes $Zr^{89}$
beta emission, configuration forbiddenness in, 6: 5521(J)
Zirconium isotopes $Zr^{91}$
magnetic moment from hfs measurements, 6: 3839(J)
Zirconium isotopes $Zr^{92}$
gamma emission from, 6: 419(J)
Zirconium isotopes $Zr^{93}$
preparation of carrier-free, 6: 1422
Zirconium isotopes $Zr^{95}$
beta emission and decay schemes, 6: 3724(J)
Zirconium isotopes $Zr^{96}$
double beta decay in, 6: 5913
radioactivity, 6: 3387(R)
Zirconium isotopes $Zr^{97}$
half life, 6: 4667(J)
radioactivity, 6: 3387(R)
Zirconium–magnesium alloys
creep, effect of rare earths on, 6: 4079(J)
phase studies, 6: 4505(R)
spectrophotometric analysis for Zr, 6: 6310(J)
Zirconium–magnesium–thorium alloys
metallurgical properties, 6: 903(R)
Zirconium–molybdenum alloys
constitution diagrams, 6: 4505(R)
Zirconium–molybdenum alloys (cont'd)
crystal structure, 6: 249(J)
Zirconium–niobium alloys
tensile properties, 6: 1475(R)
Zirconium nitrides
preparation, melting point, and crystal structure, 6: 3566(J)
Zirconium oxide–calcium oxide systems
constitution diagrams, 6: 3604(J)
fluorite phase in, 6: 3528(J)
Zirconium oxide–calcium oxide–magnesium oxide systems
phase studies, 6: 3604(J)
Zirconium oxide–magnesium oxide systems
constitution diagrams, 6: 3604(J)
Zirconium oxides
chlorination, 6: 4409(J)
crystal structure, 6: 2376
hydrofluorination of, for preparation of $ZrF_4$, 6: 2640(R)
preparation, 6: 2004(J), 2376
preparation by Zr sulfate ignition, 6: 4443(J)
production and properties of fused stabilized, from ores, 6: 2919(J)
production by chloride decomposition, 6: 1944(P)
sintering, 6: 2924
stabilization with CaO and MgO, 6: 3604(J)
thermal conductivity up to 1300°C, 6: 1448(R)
Zirconium(IV) oxides
ceramic containing, refractory properties of, 6: 886(P)
preparation from Formosan sands, 6: 892(J)
refractory properties, 6: 887(J)
stabilization by rare earth oxides, 6: 209(J)
Zirconium oxyfluorides
hydrofluorination, 6: 2640(R)
Zirconium–oxygen systems
phase studies and constitution diagrams, 6: 5379(R)
physical and mechanical properties and preparation, 6: 2929
Zirconium powders
explosive limits, 6: 1627
Zirconium silicates
(See also Zircon.)
ceramic containing, refractory properties of, 6: 886(P)
Zirconium–silicon alloys
constitution diagrams, 6: 4505(R)
Zirconium single crystals
habit plane of transformation, 6: 5111(J)
Zirconium sulfates
preparation and ignition behavior, 6: 4443(J)
Zirconium–tantalum alloys
phase studies and tensile properties, 6: 1475(R)
Zirconium–tin alloys
constitution diagrams, 6: 4505(R)
corrosion, 6: 2921(R)
solid-solubility in, determined by strain-aging technique, 6: 5375
Zirconium–titanium alloys
constitution diagrams, 6: 1229
corrosion, 6: 2921(R)
corrosion by Al chlorides, Na and Ni, 6: 1236
phase studies, 6: 233
properties, 6: 1229
Zirconium–tungsten alloys
constitution diagrams, 6: 4505(R)
Zirconyl chlorides
electric conductivity of aqueous solutions of, 6: 85
hydrolysis and ion exchange properties, 6: 86
Zoe reactor (France)
experimental reactivity curves for, 6: 696(J)
neutron cross section measurement by oscillation of, 6: 697(J)
nuclear flux and power level, 6: 4221(J)
radioisotope production in, 6: 1325(J)

# NUMERICAL INDEX OF REPORTS

## INTRODUCTION

Report numbers, references to specific abstracts, and, wherever possible, availability information for every report abstracted in *Abstracts of Declassified Documents* and *Nuclear Science Abstracts* through December 15, 1952, are given in this index. Terminology is defined in the glossary at the end of this introduction.

Reports numbered in the series MDDC, AECD, and AECU, and reports without alphabetic prefixes are at the beginning of the index in that order and are followed by reports in the series "A" through "YUP" in letter-by-letter order irrespective of punctuation. Report numbers including such phrases as Bulletin No., Progress Report No., Report No., Research Paper No., and Technical Memo No. are not listed.

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## GLOSSARY

**ADD**

*Abstracts of Declassified Documents*, predecessor of NSA, published from July 1947 through June 1948. ADD in the availability column indicates that the entire report is in *Abstracts of Declassified Documents*.

**AECD**

A code assigned to declassified reports released by the USAEC after February 29, 1948. This code and a sequential number usually replace the original report number for reference purposes. The AECD series begins with AECD-1780 and succeeds the MDDC series which ends with MDDC-1779.

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**NNES**

*National Nuclear Energy Series*, published by the McGraw-Hill Book Company, Inc., New York, New York.

**NP**

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Madison, University of Wisconsin Library

# NUMERICAL INDEX OF REPORTS

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| | The following reports were abstracted in ADD | |
| MDDC | | |
| 1 | 1,p.1 | |
| 2 | 1,p.2 | |
| 3 | 1,p.3 | |
| 4 | 1,p.4 | Phys. Rev. 70, 136-53(1946) |
| 5 | 1,p.4 | NNES Div. II, Vol. 16, Pt. II, Chap. 4; J. Applied Phys. 18, 30-3(1947) |
| 6 | 1,p.5 | Phys. Rev. 70, 583-9(1946) |
| 7 | 1,p.5 | Phys. Rev. 70, 101(1946); o.p. |
| 8 | 1,p.6 | Phys. Rev. 70, 245-8(1946) |
| 9 | 1,p.6 | Phys. Rev. 70, 458-9(1946) |
| 10 | 1,p.7 | Phys. Rev. 71, 565-7(1947) |
| 11 | 1,p.7 | Phys. Rev. 73, 956-62(1948) |
| 12 | 1,p.8 | Penguin Books |
| 13 | 1,p.8 | Phys. Rev. 70, 249-58(1946) |
| 14 | 1,p.9 | Phys. Rev. 70, 107(1946) |
| 15 | 1,p.9 | |
| 16 | 1,p.10 | Phys. Rev. 70, 104(1946) |
| 17 | 1,p.10 | J. Phys. & Colloid Chem. 51, 611-25, 786-97(1947) |
| 18 | 1,p.11 | |
| 19 | 1,p.11 | |
| 20 | 1,p.12 | J. Applied Phys. 17, 447-9(1946) |
| 21 | 1,p.13 | J. Applied Phys. 17, 444-7(1946) |
| 22 | 1,p.14 | Phys. Rev. 70, 429(1946) |
| 23 | 1,p.15 | |
| 24 | 1,p.15 | Phys. Rev. 71, 1-3(1947) |
| 25 | 1,p.16 | Phys. Rev. 70, 89(1946) |
| 26 | 1,p.17 | |
| 27 | 1,p.17 | Phys. Rev. 70, 106(1946) |
| 28 | 1,p.18 | |
| 29 | 1,p.19 | J. Am. Chem. Soc. 68, 2367-72(1946) |
| 30 | 1,p.20 | J. Am. Chem. Soc. 68, 2373-7(1946) |
| 31 | 1,p.20 | Rev. Sci. Instruments 18, 643-6(1947) |
| 32 | 1,p.21 | Phys. Rev. 72, 196-202(1947) |
| 33 | 1,p.21 | |
| 34 | 1,p.22 | NNES Div. IV, Vol. 9, Book 2, Part E, Paper 63; Phys. Rev. 70, 111(1946) |
| 35 | 1,p.22 | |
| 36 | 1,p.23 | Science 105, 265-7(1947) |
| 37 | 1,p.23 | Phys. Rev. 70, 105-7(1946); $0.10 |
| 38 | 1,p.24 | |
| 39 | 1,p.25 | Phys. Rev. 70, 118(1946) |
| 40 | 1,p.25 | |
| 41 | 1,p.26 | Phys. Rev. 69, 669-70(1946) |
| 42 | 1,p.26 | Phys. Rev. 70, 115(1946) |
| 43 | 1,p.27 | Phys. Rev. 70, 87(1946) |
| 44 | 1,p.27 | Rev. Sci. Instruments 17, 301-6(1946) |
| 45 | 1,p.28 | |
| 46 | 1,p.28 | |
| 47 | 1,p.29 | J. Chem. Education 23, 538-41(1946) |
| 48 | 1,p.30 | Phys. Rev. 70, 115(1946) |
| 49 | 1,p.31 | NNES Div. IV, Vol. 22E, Paper 4 |
| 50 | 1,p.31 | Science 104, 91-6(1946) |
| 51 | 1,p.32 | Phys. Rev. 70, 589-92(1946) |
| 52 | 1,p.32 | NNES Div. II, Vol. 16, Pt. II, Chap. 5; J. Applied Phys. 18, 34-48(1947) |
| 53 | 1,p.33 | NNES Div. II, Vol. 16, Pt. I, Chap. 1; Anal. Chem. 20, 188-94(1948) |
| 54 | 1,p.33 | Phys. Rev. 70, 815-17(1946); $0.05 |
| 55 | 1,p.34 | |
| 56 | 1,p.34 | |
| 57 | 1,p.35 | |
| 58 | 1,p.35 | |
| 59 | 1,p.36 | Revs. Modern Phys. 19, 259-97(1947) |
| 60 | 1,p.36 | |
| 61 | 1,p.37 | Phys. Rev. 71, 745-7(1947) |
| 62 | 1,p.37 | |
| 63 | 1,p.38 | NNES Div. II, Vol. 16, Pt. I, Chap. 2 |
| 64 | 1,p.38 | |
| 65 | 1,p.39 | |
| 66 | 1,p.39 | NNES Div. II, Vol. 16, Pt. III, Chap. 6 |
| 67 | 1,p.40 | $0.05 |
| 68 | 1,p.40 | |
| 69 | 1,p.41 | NNES Div. II, Vol. 16, Pt. I, Chap. 3 |
| 70 | 1,p.41 | |
| 71 | 1,p.42 | |
| 72 | 1,p.42 | |
| 73 | 1,p.43 | |
| 74 | 1,p.44 | Science 105, 27-32(1947) |
| 75 | 1,p.44 | |
| 76 | 1,p.45 | |
| 77 | 1,p.45 | |
| 78 | 1,p.46 | |
| 79 | 1,p.46 | Science 103, 697-705(1946) |
| 80 | 1,p.47 | Rev. Sci. Instruments 18, 884-93(1947) |
| 81 | 1,p.47 | |
| 82 | 1,p.48 | |
| 83 | 1,p.48 | |
| 84 | 1,p.49 | o.p. |
| 85 | 1,p.49 | |
| 86 | 1,p.49 | |
| 87 | 1,p.50 | |
| 88 | 1,p.50 | J. Chem. Phys. 14, 569(1946) |
| 89 | 1,p.51 | |
| 90 | 1,p.51 | Science 104, 156-60(1946); J. Research Natl. Bur. Standards 38, 137-68(1947) |
| 91 | 1,p.52 | |
| 92 | 1,p.52 | o.p. |
| 93 | 1,p.53 | Phys. Rev. 70, 580-2(1946) |
| 94 | 1,p.53 | o.p. |
| 95 | 1,p.54 | |
| 96 | 1,p.55 | Rev. Sci. Instruments 18, 44-7(1947) |
| 97 | 1,p.55 | Metals Technol. 14, (1947), Tech. Pub. 2152 |
| 98 | 1,p.56 | J. Am. Chem. Soc. 68, 2117(1946) |
| 99 | 1,p.56 | |
| 100 | 1,p.57 | Phys. Rev. 70, 431(1946) |
| 101 | 1,p.57 | o.p. |
| 102 | 1,p.58 | o.p. |
| 103 | 1,p.58 | |
| 104 | 1,p.58 | |
| 105 | 1,p.59 | |
| 106 | 1,p.59 | o.p. |
| 107 | 1,p.59 | |
| 108 | 1,p.59 | o.p. |
| 109 | 1,p.59 | o.p. |
| 110 | 1,p.60 | |
| 111 | 1,p.61 | o.p. |
| 112 | 1,p.61 | |
| 113 | 1,p.61 | o.p. |

| REPORT MDDC | ABSTRACT | AVAILABILITY |
|---|---|---|
| 114 | 1,p.61 | |
| 115 | 1,p.62 | Phys. Rev. 73, 207-15(1948) |
| 116 | 1,p.62 | |
| 117 | 1,p.62 | |
| 118 | 1,p.62 | |
| 119 | 1,p.63 | |
| 120 | 1,p.64 | |
| 121 | 1,p.64 | |
| 122 | 1,p.65 | |
| 123 | 1,p.65 | Phys. Rev. 70, 602-5(1946) |
| 124 | 1,p.66 | Phys. Rev. 71, 210-11(1947) |
| 125 | 1,p.66 | Phys. Rev. 69, 686(1946) |
| 126 | 1,p.67 | J. Am. Ceram. Soc. 30, 242-5(1947) |
| 127 | 1,p.67 | |
| 128 | 1,p.68 | o.p. |
| 129 | 1,p.68 | o.p. |
| 130 | 1,p.68 | |
| 131 | 1,p.68 | o.p. |
| 132 | 1,p.68 | o.p. |
| 133 | 1,p.68 | |
| 134 | 1,p.69 | Phys. Rev. 70, 808-11(1946) |
| 135 | 1,p.69 | o.p. |
| 136 | 1,p.69 | o.p. |
| 137 | 1,p.69 | |
| 138 | 1,p.69 | |
| 139 | 1,p.69 | |
| 140 | 1,p.70 | Phys. Rev. 70, 232(1946) |
| 141 | 1,p.71 | Phys. Rev. 70, 640-2(1946); $0.05 |
| 142 | 1,p.72 | NNES Div. VII, Vol. 1, Pt. V, Paper 33 |
| 143 | 1,p.73 | Phys. Rev. 70, 448(1946); $0.05 |
| 144 | 1,p.74 | o.p. |
| 145 | 1,p.75 | Radiology 49, 361-3(1947); o.p. |
| 146 | 1,p.76 | o.p. |
| 147 | 1,p.77 | Phys. Rev. 70, 444(1946); o.p. |
| 148 | 1,p.77 | Phys. Rev. 70, 445(1946); $0.10 |
| 149 | 1,p.78 | $0.10 |
| 150 | 1,p.78 | |
| 151 | 1,p.79 | o.p. |
| 152 | 1,p.79 | NNES Div. II, Vol. 16, Pt. IV, Chap. 7; Chem. Eng. Progress 44, 315-26(1948) |
| 153 | 1,p.81 | NNES Div. II, Vol. 16, Pt. IV, Chap. 8 |
| 154 | 1,p.81 | NNES Div. VII, Vol. 1, Chap. 7; Ind. Eng. Chem. 39, 281-3(1947) |
| 155 | 1,p.82 | o.p. |
| 156 | 1,p.83 | NNES Div. VII, Vol. 1, Chap. 5 |
| 157 | 1,p.84 | $0.10 |
| 158 | 1,p.84 | NNES Div. VII, Vol. 1, Chap. 19 |
| 159 | 1,p.85 | NNES Div. VII, Vol. 1, Chap. 20 |
| 160 | 1,p.85 | NNES Div. VII, Vol. 1, Chap. 27 |
| 161 | 1,p.86 | NNES Div. VII, Vol. 1, Chap. 21 |
| 162 | 1,p.86 | NNES Div. VII, Vol. 1, Chap. 36 |
| 163 | 1,p.87 | NNES Div. VII, Vol. 1, Chap. 13 |
| 164 | 1,p.88 | NNES Div. VII, Vol. 1, Chap. 14 |
| 165 | 1,p.89 | NNES Div. VII, Vol. 1, Chap. 16 |
| 166 | 1,p.89 | NNES Div. VII, Vol. 1, Chap. 37 |
| 167 | 1,p.90 | NNES Div. VII, Vol. 1, Chap. 38 |
| 168 | 1,p.90 | Anal. Chem. 19, 148-9(1947) |
| 169 | 1,p.91 | |
| 170 | 1,p.91 | Anal. Chem. 19, 146-7(1947) |
| 171 | 1,p.92 | Phys. Rev. 69, 686(1946) $0.10 |
| 172 | 1,p.92 | NNES Div. VII, Vol. 1, Chap. 4 |
| 173 | 1,p.93 | $0.05 |
| 174 | 1,p.93 | Phys. Rev. 70, 444(1946); o.p. |
| 175 | 1,p.94 | |
| 176 | 1,p.95 | |
| 177 | 1,p.95 | |
| 178 | 1,p.96 | |
| 179 | 1,p.96 | |
| 180 | 1,p.97 | ADD |
| 181 | 1,p.97 | |
| 182 | 1,p.98 | Phys. Rev. 70, 445(1946); o.p. |
| 183 | 1,p.99 | Rev. Sci. Instruments 18, 86-9(1947); $0.10 |
| 184 | 1,p.99 | See MDDC-626 for rev. |
| 185 | 1,p.100 | $0.05 |
| 186 | 1,p.100 | NNES Div. II, Vol. 16, Pt. IV, Chap. 9 |
| 187 | 1,p.102 | $0.05 |
| 188 | 1,p.102 | |
| 189 | 1,p.103 | Phys. Rev. 71, 272(1947) |
| 190 | 1,p.103 | NNES Div. VII, Vol. 1, Pt. VI, Paper 40 |
| 191 | 1,p.104 | |
| 192 | 1,p.104 | |
| 193 | 1,p.105 | |
| 194 | 1,p.105 | o.p. |
| 195 | 1,p.106 | |
| 196 | 1,p.106 | Anal. Chem. 19, 150-3(1947) |
| 197 | 1,p.107 | |
| 198 | 1,p.107 | Rev. Sci. Instruments 18, 294-7(1947) |
| 199 | 1,p.108 | |
| 200 | 1,p.109 | Phys. Rev. 70, 434-5(1946) |
| 201 | 1,p.109 | Phys. Rev. 72, 203-6(1947); o.p. |
| 202 | 1,p.110 | NNES Div. VII, Vol. 1, Chap. 23; Ind. Eng. Chem. 39, 314-19(1947) |
| 203 | 1,p.111 | |
| 204 | 1,p.112 | |
| 205 | 1,p.112 | Phys. Rev. 70, 595-6(1946); o.p. |
| 206 | 1,p.113 | Phys. Rev. 70, 101(1946); $0.10 |
| 207 | 1,p.113 | Phys. Rev. 70, 101(1946); o.p. |
| 208 | 1,p.114 | |
| 209 | 1,p.114 | |
| 210 | 1,p.115 | o.p. |
| 211 | 1,p.115 | |
| 212 | 1,p.116 | |
| 213 | 1,p.116 | NNES Div. VII, Vol. 1, Chap. 35 |
| 214 | 1,p.117 | NNES Div. VII, Vol. 1, Chap. 24 |
| 215 | 1,p.117 | |
| 216 | 1,p.118 | |
| 217 | 1,p.118 | |
| 218 | 1,p.119 | NNES Div. VII, Vol. 1, Chap. 17; Ind. Eng. Chem. 39, 384-6(1947) |
| 219 | 1,p.120 | NNES Div. VII, Vol. 1, Chap. 18; Ind. Eng. Chem. 39, 305-9(1947) |
| 220 | 1,p.120 | NNES Div. VII, Vol. 1, Chap. 15 |
| 221 | 1,p.121 | $0.20 |
| 222 | 1,p.121 | 0.05 |
| 223 | 1,p.122 | o.p. |
| 224 | 1,p.122 | NNES Div. VII, Vol. 1, Chap. 9; Ind. Eng. Chem. 39, 373-4(1947) |
| 225 | 1,p.123 | NNES Div. VII, Vol. 1, Chap. 22 |
| 226 | 1,p.123 | NNES Div. IV, Vol. 20, Paper 7 |
| 227 | 1,p.124 | Science 104, 379-86(1946); Nature 159, 863-5(1947) |
| 228 | 1,p.124 | o.p. |
| 229 | 1,p.125 | |
| 230 | 1,p.126 | NNES Div. VII, Vol. 1, Chap. 10 |
| 231 | 1,p.126 | Phys. Rev. 70, 557-8(1946); o.p. |
| 232 | 1,p.127 | Phys. Rev. 72, 729(1947) |
| 233 | 1,p.127 | |
| 234 | 1,p.128 | Anal. Chem. 19, 222-4(1947) |
| 235 | 1,p.128 | |
| 236 | 1,p.129 | |
| 237 | 1,p.130 | |
| 238 | 1,p.130 | |
| 239 | 1,p.131 | |
| 240 | 1,p.131 | J. Phys. and Colloid Chem. 51, 984-1003(1947) |
| 241 | 1,p.132 | |
| 242 | 1,p.132 | o.p. |
| 243 | 1,p.133 | |
| 244 | 1,p.133 | |
| 245 | 1,p.134 | o.p. |
| 246 | 1,p.134 | o.p. |
| 247 | 1,p.134 | o.p. |
| 248 | 1,p.135 | |
| 249 | 1,p.136 | NNES Div. VI, Vol. 1, Pt. I, Chap. 4 |
| 250 | 1,p.137 | |
| 251 | 1,p.138 | |
| 252 | 1,p.138 | NNES Div. VI, Vol. 1, Pt. I, Chap. 14 |
| 253 | 1,p.139 | NNES Div. VI, Vol. 1, Pt. I, Chap. 15 |
| 254 | 1,p.140 | |
| 255 | 1,p.140 | NNES Div. VII, Vol. 1, Chap. 8 |
| 256 | 1,p.141 | Phys. Rev. 71, 508-10(1947); $0.10 |
| 257 | 1,p.141 | NNES Div. VI, Vol. 1, Pt. I, Chap. 12 |
| 258 | 1,p.143 | NNES Div. VI, Vol. 1, Pt. I, Chap. 6 |
| 259 | 1,p.144 | Radiology 49, 349-60(1947) |
| 260 | 1,p.144 | NNES Div. VI, Vol. 1, Pt. I, Chap. 16 |
| 261 | 1,p.145 | |
| 262 | 1,p.146 | Chem. Eng. News 24, 3168-73(1946); o.p. |
| 263 | 1,p.147 | NNES Div. VI, Vol. 1, Pt. I, Chap. 7 |
| 264 | 1,p.149 | NNES Div. VI, Vol. 1, Pt. I, Chap. 11 |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| MDDC | | |
| 265 | 1,p.150 | NNES Div. VI, Vol. 1, Pt. I, Chap. 9 |
| 266 | 1,p.150 | NNES Div. VI, Vol. 1, Pt. I, Chap. 8 |
| 267 | 1,p.152 | |
| 268 | 1,p.152 | |
| 269 | 1,p.153 | |
| 270 | 1,p.153 | |
| 271 | 1,p.154 | NNES Div. VI, Vol. 1, Pt. I, Chap. 5 |
| 272 | 1,p.155 | |
| 273 | 1,p.156 | $0.25 |
| 274 | 1,p.157 | |
| 275 | 1,p.158 | |
| 276 | 1,p.158 | |
| 277 | 1,p.159 | |
| 278 | 1,p.159 | |
| 279 | 1,p.160 | o.p. |
| 280 | 1,p.161 | J. Am. Chem. Soc. 69, 2500-2(1947) |
| 281 | 1,p.163 | Phys. Rev. 70, 569(1946) |
| 282 | 1,p.163 | o.p. |
| 283 | 1,p.164 | Ind. Eng. Chem. 39, 259-62(1947) |
| 284 | 1,p.164 | Phys. Rev. 70, 327-30(1947) |
| 285 | 1,p.165 | |
| 286 | 1,p.165 | |
| 287 | 1,p.166 | |
| 288 | 1,p.166 | |
| 289 | 1,p.167 | Chem. Eng. News 24, 2906-9(1946) |
| 290 | 1,p.167 | $0.05 |
| 291 | 1,p.168 | Rev. Sci. Instruments 19, 28-30(1948) |
| 292 | 1,p.169 | Phys. Rev. 71, 826(1947) |
| 293 | 1,p.169 | $0.10 |
| 294 | 1,p.170 | o.p. |
| 295 | 1,p.170 | |
| 296 | 1,p.171 | o.p. |
| 297 | 1,p.173 | |
| 298 | 1,p.174 | |
| 299 | 1,p.174 | |
| 300 | 1,p.175 | |
| 301 | 1,p.176 | Phys. Rev. 71, 141(1947) |
| 302 | 1,p.176 | |
| 303 | 1,p.177 | |
| 304 | 1,p.177 | |
| 305 | 1,p.178 | NNES Div. IV, Vol. 14B, Pt. I, Paper 1.3 |
| 306 | 1,p.178 | |
| 307 | 1,p.179 | Phys. Rev. 70, 561(1946) |
| 308 | 1,p.180 | |
| 309 | 1,p.180 | |
| 310 | 1,p.181 | |
| 311 | 1,p.181 | |
| 312 | 1,p.182 | |
| 313 | 1,p.183 | Ind. Eng. Chem. 39, 286-8(1947) |
| 314 | 1,p.183 | |
| 315 | 1,p.184 | Phys. Rev. 71, 497-507(1947) |
| 316 | 1,p.184 | |
| 317 | 1,p.185 | $0.10 |
| 318 | 1,p.185 | |
| 319 | 1,p.186 | NNES Div. VII, Vol. 1, Chap. 34; Ind. Eng. Chem. 39, 290-2(1947) |
| 320 | 1,p.186 | |
| 321 | 1,p.187 | NNES Div. VI, Vol. 1, Pt. I, Chap. 2 |
| 322 | 1,p.188 | NNES Div. VI, Vol. 1, Introd. |
| 323 | 1,p.189 | NNES Div. VI, Vol. 1, Foreword |
| 324 | 1,p.190 | |
| 325 | 1,p.190 | Ind. Eng. Chem. 39, 350-2(1947) |
| 326 | 1,p.191 | Blood 3, 593-611(1948) |
| 327 | 1,p.191 | Phys. Rev. 72, 109-15(1947); $0.10 |
| 328 | 1,p.192 | NNES Div. VII, Vol. 1, Chap. 2; Ind. Eng. Chem. 39, 244-8(1947) |
| 329 | 1,p.193 | |
| 330 | 1,p.193 | NNES Div. VI, Vol. 1, Pt. II, Chap. 17 |
| 331 | 1,p.195 | Ind. Eng. Chem. 39, 352-4(1947) |
| 332 | 1,p.196 | NNES Div. VI, Vol. 1, Pt. I, Chap. 3 |
| 333 | 1,p.196 | Phys. Rev. 71, 911(1947) |
| 334 | 1,p.197 | Phys. Rev. 70, 766(1946) |
| 335 | 1,p.198 | NNES Div. IV, Vol. 14B, Pt. I, Paper 6.23 |
| 336 | 1,p.198 | NNES Div. IV, Vol. 14B, Pt. I, Paper 3.10 |
| 337 | 1,p.199 | NNES Div. IV, Vol. 14B, Pt. I, Paper 3.11 |
| 338 | 1,p.200 | NNES Div. IV, Vol. 14B, Pt. I, Paper 3.9 |
| 339 | 1,p.201 | NNES Div. IV, Vol. 14B, Pt. I, Paper 3.12 |
| 340 | 1,p.202 | Anal. Chem. 20, 282(1948) |
| 341 | 1,p.203 | $0.05 |
| 342 | 1,p.203 | |
| 343 | 1,p.204 | J. Am. Chem. Soc. 71, 2600-7(1949) |
| 344 | 1,p.204 | |
| 345 | 1,p.205 | J. Optical Soc. Am. 37, 279-88(1947) |
| 346 | 1,p.205 | o.p. |
| 347 | 1,p.206 | Ind. Eng. Chem. 39, 367-74(1947) |
| 348 | 1,p.206 | Phys. Rev. 73, 852-62(1948) |
| 349 | 1,p.207 | NNES Div. IV, Vol. 14B, Pt. I, Paper 1.2; Phys. Rev. 70, 555-6(1946) |
| 350 | 1,p.207 | |
| 351 | 1,p.208 | |
| 352 | 1,p.208 | Phys. Rev. 71, 14-19(1947) |
| 353 | 1,p.209 | o.p. |
| 354 | 1,p.209 | |
| 355 | 1,p.210 | Anal. Chem. 19, 824-7(1947) |
| 356 | 1,p.210 | o.p. |
| 357 | 1,p.211 | |
| 358 | 1,p.212 | |
| 359 | 1,p.213 | Phys. Rev. 72, 1147-56(1947) |
| 360 | 1,p.213 | |
| 361 | 1,p.214 | |
| 362 | 1,p.214 | o.p. |
| 363 | 1,p.215 | $0.10 |
| 364 | 1,p.215 | |
| 365 | 1,p.216 | NNES Div. VIII, Vol. 1, Chap. 28 |
| 366 | 1,p.216 | |
| 367 | 1,p.217 | |
| 368 | 1,p.217 | J. Chem. Phys. 16, 429-36(1948) |
| 369 | 1,p.218 | NNES Div. VIII, Vol. 1, Chap. 21 |
| 370 | 1,p.218 | |
| 371 | 1,p.219 | Arch. Biochem. 23, 434-45(1949) |
| 372 | 1,p.219 | NNES Div. VIII, Vol. 1, Chap. 15 |
| 373 | 1,p.220 | NNES Div. VIII, Vol. 1, Chap. 19 |
| 374 | 1,p.220 | |
| 375 | 1,p.221 | |
| 376 | 1,p.221 | NNES Div. VI, Vol. 1, Pt. I, Chap. 10 |
| 377 | 1,p.222 | |
| 378 | 1,p.223 | o.p. |
| 379 | 1,p.223 | |
| 380 | 1,p.224 | J. Research Natl. Bur. Standards 39, 397-409(1947) |
| 381 | 1,p.224 | Phys. Rev. 70, 768(1946) |
| 382 | 1,p.225 | |
| 383 | 1,p.225 | |
| 384 | 1,p.226 | o.p. |
| 385 | 1,p.226 | o.p. |
| 386 | 1,p.227 | Phys. Rev. 70, 982-3(1946); $0.05 |
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| 726 | 1,p.465 | Science 105, 265-7(1947) |
| 727 | 1,p.465 | o.p. |
| 728 | 1,p.466 | $0.05 |
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| 730 | 1,p.467 | $0.10 |
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| 732 | 1,p.468 | Phys. Rev. 72, 163(1947); $0.05 |
| 733 | 1,p.468 | Phys. Rev. 71, 454(1947); $0.05 |
| 734 | 1,p.469 | o.p. |
| 735 | 1,p.469 | Phys. Rev. 71, 757-76(1947); $0.20 |
| 736 | 1,p.470 | Phys. Rev. 71, 556-7(1947); $0.05 |
| 737 | 1,p.470 | $0.10 |
| 738 | 1,p.471 | Phys. Rev. 71, 887-90(1947); $0.05 |
| 739 | 1,p.471 | o.p. |
| 740 | 1,p.472 | o.p. |
| 741 | 1,p.472 | o.p. |
| 742 | 1,p.473 | Rev. Sci. Instruments 18, 556-8(1947) |
| 743 | 1,p.473 | |
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| 745 | 1,p.475 | $0.05 |
| 746 | 1,p.475 | o.p. |
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| 748 | 1,p.476 | |
| 749 | 1,p.477 | NNES Div. IV, Vol. 14B, Pt. I, Paper 3.15 |
| 750 | 1,p.477 | Physiol. Zoöl. 20, 405-21(1947) |
| 751 | 1,p.478 | NNES Div. VIII, Vol. 1, Chap. 24 |
| 752 | 1,p.478 | NNES Div. VIII, Vol. 1, Chap. 26 |
| 753 | 1,p.479 | NNES Div. IV, Vol. 14B, Pt. II, Paper 14.5 |
| 754 | 1,p.479 | |
| 755 | 1,p.480 | NNES Div. VIII, Vol. 1, Chap. 14 |
| 756 | 1,p.481 | |
| 757 | 1,p.481 | NNES Div. IV, Vol. 23, Pt. B, Paper 10 |
| 758 | 1,p.482 | J. Am. Chem. Soc. 69, 2105-7(1947) |
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| 760 | 1,p.483 | NNES Div. IV, Vol. 23, Pt. B, Paper 9 |
| 761 | 1,p.483 | |
| 762 | 1,p.485 | Phys. Rev. 71, 321(1947) |
| 763 | 1,p.485 | o.p. |
| 764 | 1,p.486 | |
| 765 | 1,p.486 | Genetics 33, 43-74(1948) |
| 766 | 1,p.487 | $0.10 |
| 767 | 1,p.488 | |
| 768 | 1,p.489 | o.p. |
| 769 | 1,p.489 | Anal. Chem. 19, 828-32(1947) |
| 770 | 1,p.490 | o.p. |
| 771 | 1,p.490 | Phys. Rev. 72, 193-6(1947); $0.10 |
| 772 | 1,p.491 | |
| 773 | 1,p.491 | Rev. Sci. Instruments 18, 706-15(1947); o.p. |
| 774 | 1,p.492 | Phys. Rev. 71, 372(1947); $0.05 |
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| 776 | 1,p.493 | o.p. |
| 777 | 1,p.493 | o.p. |
| 778 | 1,p.494 | o.p. |
| 779 | 1,p.494 | Phys. Rev. 71, 743(1947) |
| 780 | 1,p.495 | o.p. |
| 781 | 1,p.495 | |
| 782 | 1,p.496 | $0.05 |

| REPORT MDDC | ABSTRACT | AVAILABILITY |
|---|---|---|
| 783 | 1,p.497 | |
| 784 | 1,p.497 | J. Am. Chem. Soc. 69, 2069(1947) |
| 785 | 1,p.498 | o.p. |
| 786 | 1,p.499 | Phys. Rev. 72, 91-8(1947) |
| 787 | 1,p.499 | ADD; NNES Div. IV, Vol. 14B, Pt. II, Paper 19.13; Phys. Rev. 71, 378(1947) |
| 788 | 1,p.500 | Rev. Sci. Instruments 18, 540-5(1947); o.p. |
| 789 | 1,p.500 | $0.05 |
| 790 | 1,p.501 | 0.05 |
| 791 | 1,p.501 | Rev. Sci. Instruments 18, 639-43(1947); o.p. |
| 792 | 1,p.502 | o.p. |
| 793 | 1,p.502 | J. Chem. Phys. 15, 374-5(1947); $0.05 |
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| 796 | 1,p.504 | |
| 797 | 1,p.505 | Phys. Rev. 72, 167(1947) |
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| 807 | 1,p.510 | ADD; Phys. Rev. 72, 168(1947) |
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| 809 | 1,p.511 | Phys. Rev. 73, 1277(1948) |
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| 812 | 1,p.513 | Phys. Rev. 74, 631-8(1948); $0.05 |
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| 814 | 1,p.514 | NNES Div. IV, Vol. 14B, Pt. I, Paper 3.16; o.p. |
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| 818 | 1,p.516 | o.p. |
| 819 | 1,p.516 | Phys. Rev. 71, 836(1947) |
| 820 | 1,p.517 | Phys. Rev. 72, 162(1947) |
| 821 | 1,p.517 | o.p. |
| 822 | 1,p.518 | Phys. Rev. 72, 168(1947) |
| 823 | 1,p.518 | ADD; Phys. Rev. 72, 169(1947) |
| 824 | 1,p.519 | $0.10 |
| 825 | 1,p.520 | NNES Div. IV, Vol. 23, Pt. B, Paper 6 |
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| 835 | 1,p.524 | ADD |
| 836 | 1,p.525 | J. Exptl. Med. 87, 71-86(1948); o.p. |
| 837 | 1,p.526 | J. Chem. Phys. 15, 703-12(1947) |
| 838 | 1,p.527 | Phys. Rev. 72, 167(1947) |
| 839 | 1,p.528 | o.p. |
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| 841 | 1,p.529 | $0.10 |
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| 843 | 1,p.530 | Phys. Rev. 71, 915(1947); $0.05 |
| 844 | 1,p.530 | Phys. Rev. 72, 408-10(1947) |
| 845 | 1,p.531 | Phys. Rev. 72, 907-13(1947); $0.10 |
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| 848 | 1,p.532 | o.p. |
| 849 | 1,p.533 | Phys. Rev. 73, 1277-90(1948); $0.05 |
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| 852 | 1,p.534 | NNES Div. IV, Vol. 14B, Pt. II, Paper 22.60; o.p. |
| 853 | 1,p.535 | Radiology 51, 400-13(1948) |
| 854 | 1,p.535 | o.p. |
| 855 | 1,p.535 | o.p. |
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| 859 | 1,p.536 | Phys. Rev. 72, 82(1947); o.p. |
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| 865 | 1,p.538 | J. Am. Chem. Soc. 69, 1719-23(1947) |
| 866 | 1,p.538 | Phys. Rev. 72, 312-20(1947) |
| 867 | 1,p.539 | Phys. Rev. 69, 366-7(1946); o.p. |
| 868 | 1,p.539 | |
| 869 | 1,p.540 | Phys. Rev. 73, 830-41(1948); $0.10 |
| 870 | 1,p.540 | Rev. Sci. Instruments 21, 558-68(1950); o.p. |
| 871 | 1,p.540 | Phys. Rev. 72, 173(1947); $0.05 |
| 872 | 1,p.541 | $0.10 |
| 873 | 1,p.541 | Phys. Rev. 73, 1277-90(1948); $0.05 |
| 874 | 1,p.541 | Phys. Rev. 71, 907(1947); $0.05 |
| 875 | 1,p.542 | Phys. Rev. 72, 447-51(1947); o.p. |
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| 903 | 1,p.551 | Anal. Chem. 20, 1077-8(1948) |
| 904 | 1,p.551 | NNES Div. IV, Vol. 14B, Pt. I, Paper 3.100; $0.15 |
| 905 | 1,p.553 | NNES Div. IV, Vol. 14B, Pt. II, Paper 22.50; $0.10 |
| 906 | 1,p.553 | NNES Div. IV, Vol. 14B, Pt. I, Paper 4.19; $0.10 |
| 907 | 1,p.553 | J. Natl. Cancer Inst. 6, 349-53(1946) |
| 908 | 1,p.554 | o.p. |
| 909 | 1,p.554 | Chem. Eng. 54, 122-5(1947) |
| 910 | 1,p.554 | o.p. |
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| 927 | 1,p.559 | o.p. |
| 928 | 1,p.559 | o.p. |
| 929 | 1,p.560 | o.p. |
| 930 | 1,p.560 | o.p. |

| REPORT | ABSTRACT | AVAILABILITY |
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| MDDC | | |
| 931 | 1,p.560 | o.p. |
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| 933 | 1,p.560 | Phys. Rev. 72, 649-61(1947); $0.10 |
| 934 | 1,p.561 | o.p. |
| 935 | 1,p.561 | Phys. Rev. 76, 531-7(1949); o.p. |
| 936 | 1,p.561 | Am. J. Opthalmology 31, 147(1948); $0.15 |
| 937 | 1,p.562 | Chem. Eng. News 25, 3794-8(1947) |
| 938 | 1,p.562 | Phys. Rev. 72, 349(1947); $0.05 |
| 939 | 1,p.563 | Phys. Rev. 72, 541-4(1947); $0.10 |
| 940 | 1,p.563 | Phys. Rev. 72, 545-9(1947); $0.10 |
| 941 | 1,p.563 | o.p. |
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| 944 | 1,p.564 | o.p. |
| 945 | 1,p.564 | o.p. |
| 946 | 1,p.564 | Phys. Rev. 72, 926-30(1947); o.p. |
| 947 | 1,p.564 | ADD |
| 948 | 1,p.565 | Phys. Rev. 72, 743(1947) |
| 949 | 1,p.565 | NNES Div. IV, Vol. 14B, Pt. I, Paper 4.21 |
| 950 | 1,p.565 | |
| 951 | 1,p.565 | ADD; Phys. Rev. 72, 1003-7(1947) |
| 952 | 1,p.565 | $0.10 |
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| 956 | 1,p.568 | Phys. Rev. 72, 744(1947) |
| 957 | 1,p.568 | Phys. Rev. 72, 746(1947) |
| 958 | 1,p.569 | J. Phys. & Colloid Chem. 52, 350-7(1948) |
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| 965 | 1,p.571 | Science 105, 664-5(1947) |
| 966 | 1,p.571 | J. Biol. Chem. 169, 459-60(1947) |
| 967 | 1,p.571 | $0.25 |
| 968 | 1,p.572 | Phys. Rev. 72, 585-90(1947); $0.10 |
| 969 | 1,p.572 | Phys. Rev. 73, 830-41(1948); $0.05 |
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| 972 | 1,p.573 | Phys. Rev. 72, 673-7(1947); o.p. |
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| 974 | 1,p.573 | Rev. Sci. Instruments 18, 682-3(1947); $0.05 |
| 975 | 1,p.574 | Phys. Rev. 72, 248(1947); $0.05 |
| 976 | 1,p.574 | Phys. Rev. 72, 435(1947) |
| 977 | 1,p.574 | J. Am. Chem. Soc. 70, 1037-9(1948) |
| 978 | 1,p.575 | Phys. Rev. 72, 85(1947); $0.05 |
| 979 | 1,p.575 | Am. J. Physiol. 150, 480-7(1947) |
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| 982 | 1,p.576 | $0.05 |
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| 985 | 1,p.577 | Anal. Chem. 20, 458-60(1948) |
| 986 | 1,p.577 | ADD; $0.05 |
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| 988 | 1,p.578 | ADD; Phys. Rev. 72, 741(1947) |
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| 993 | 1,p.579 | NNES Div. IV, Vol. 20, Pt. B, Paper 10; o.p. |
| 994 | 1,p.580 | ADD; Phys. Rev. 72, 740(1947); $0.05 |
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| 1003 | 1,p.583 | ADD |
| 1004 | 1,p.584 | |
| 1005 | 1,p.585 | $0.10 |
| 1006 | 1,p.586 | Soil Sci. 65, 129-34(1948) |
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| 1008 | 1,p.587 | ADD |
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| 1013 | 1,p.589 | ADD; Phys. Rev. 72, 739(1947) |
| 1014 | 1,p.590 | $0.50 |
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| 1016 | 1,p.590 | NNES Div. V, Vol. 2, Chaps. 1-5 |
| 1017 | 1,p.591 | NNES Div. V, Vol. 2, Chaps. 6-9 |
| 1018 | 1,p.591 | J. Biol. Chem. 176, 283-93(1948) |
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| 1020 | 1,p.592 | Phys. Rev. 72, 739(1947) |
| 1021 | 1,p.593 | ADD |
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| 1026 | 1,p.595 | J. Am. Chem. Soc. 69, 2879-81(1947) |
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| 1029 | 1,p.596 | Phys. Rev. 72, 680-1(1947); $0.10 |
| 1030 | 1,p.596 | J. Electrochem. Soc. 98, 83-8(1951) $0.10 |
| 1031 | 1,p.596 | Anal. Chem. 20, 233-5(1948) |
| 1032 | 1,p.596 | $0.10 |
| 1033 | 1,p.597 | Rev. Sci. Instruments 18, 821-30(1947); o.p. |
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| 1046 | 1,p.602 | Phys. Rev. 72, 591-3(1947); $0.05 |
| 1047 | 1,p.602 | J. Biol. Chem. 173, 207-9(1948) |
| 1048 | 1,p.603 | Phys. Rev. 72, 352(1947); $0.05 |
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| 1056 | 1,p.606 | J. Phys. & Colloid Chem. 52, 479-90 (1948); o.p. |
| 1057 | 1,p.606 | o.p. |
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| 1064 | 1,p.609 | Revs. Modern Phys. 19, 185-238(1947) |
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| 1067 | 1,p.610 | |
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| 1072 | 1,p.612 | NNES Div. IV, Vol. 9, Book 1, Pt. I, Paper 16 |
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| 1075 | 1,p.613 | J. Am. Chem. Soc. 69, 2836-48(1947) |
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| 1078 | 1,p.615 | Metal Progress 52, 387-90(1947) |
| 1079 | 1,p.615 | ADD; Rev. Sci. Instruments 18, 796(1947) |
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| REPORT | ABSTRACT | AVAILABILITY |
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| MDDC | | |
| 1081 | 1,p.616 | $0.10 |
| 1082 | 1,p.616 | Phys. Rev. 72, 902-7(1947); $0.10 |
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| 1084 | 1,p.617 | Phys. Rev. 72, 967-70(1947); $0.10 |
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| 1095 | 1,p.621 | o.p. |
| 1096 | 1,p.621 | J. Research Natl. Bur. Standards 39, 317-20(1947) |
| 1097 | 1,p.621 | ADD; Phys. Rev. 74, 991(1947) |
| 1098 | 1,p.622 | |
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| 1100 | 1,p.622 | $0.15 |
| 1101 | 1,p.623 | o.p. |
| 1102 | 1,p.623 | J. Lab. Clin. Med. 32, 1045-59(1947) |
| 1103 | 1,p.623 | |
| 1104 | 1,p.624 | Econometrica 15, 314-34(1947); Bull. Atomic Scientists 4, 115-21(1948) |
| 1105 | 1,p.624 | NNES Div. IV, Vol. 14B, Pt. I, Paper 4.22 |
| 1106 | 1,p.625 | $0.05 |
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| 1113 | 1,p.627 | J. Am. Chem. Soc. 69, 2849-59(1947) |
| 1114 | 1,p.628 | |
| 1114A | 1,p.628 | |
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| 2037 | 1-15 | |
| 2038 | 1-74 | $0.10 |
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| **ADH (Non-AEC)** | | |
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| **ADI (Non-AEC)** | | |
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| 46 | 2-1644 | |
| 57 | 2-1637 | |
| **ADL (Non-AEC)** | | |
| 51 | 2-569 | |
| **ADP (Non-AEC)** | | |
| 60 | 2-1419 | |
| 78 | 3-427 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
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| 32(E6) | 4-259 | |
| 33 | 4-260 | |
| **AERE-T/M (British)** | | |
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| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
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| AM (Non-AEC) | | |
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| 4451(p.32-5) | 5-1713 | |
| 4451(p.36-8) | 5-1714 | |
| 4451(p.39-41) | 5-1715 | |
| 4451(p.42-6) | 5-1716 | |
| 4451(p.47-9) | 5-1717 | |
| 4451(p.50-2) | 5-1718 | |
| 4451(p.53-6) | 5-1719 | |
| 4451(p.57-8) | 5-1777 | |
| 4451(p.59-62) | 5-1800 | |
| 4451(p.63-5) | 5-1720 | |
| 4451(p.66-74) | 5-1721 | |
| 4451(p.75-6) | 5-1722 | |
| 4451(p.77-8) | 5-1723 | |
| 4451(p.79-81) | 5-1724 | |
| 4451(p.82-3) | 5-1725 | |
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| 4451(p.99-100) | 5-1727 | |
| 4451(p.101) | 5-1728 | |
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| 4488(p.65-7) | 5-2434 | |
| 4488(p.68) | 5-2410 | |
| 4488(p.69-73) | 5-2411 | |
| 4488(p.74-7) | 5-2325 | |
| 4488(p.78-81) | 5-2326 | |
| 4488(p.82-4) | 5-2399 | |
| 4488(p.85-6) | 5-2358 | |
| 4488(p.87-9) | 5-2366 | |
| 4488(p.90-1) | 5-2367 | |
| 4488(p.92) | 5-2327 | |
| 4488(p.93-104) | 5-2328 | |
| 4488(p.105-22) | 5-2329 | |
| 4488(p.123-34) | 5-2531 | |
| 4488(p.135-41) | 5-2600 | |
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| 4531(p.64-71) | 5-5452 | |
| 4531(p.72-106, 120-2, 157-62, 183-91) | 5-5526 | |
| 4531(p.123-5) | 5-5466 | |
| 4531(p.143-52) | 5-5595 | |
| 4531(p.153-5) | 5-5565 | |
| 4531(p.163-7) | 5-5923 | |
| 4531(p.169-76) | 5-5743 | |
| 4531(p.183-90) | 5-2364 | |
| 4563 | 5-2644 | |
| 4565 | 5-2828 | |
| 4571 | 5-5461 | |
| 4571(p.17-20, 48-57) | 5-5473 | |
| 4571(p.21-4, 28-9, 58-9, 94-100, 106-25) | 5-5474 | |
| 4571(p.25-7, 126-39) | 5-5786 | |
| 4571(p.30-46) | 5-5475 | |
| 4571(p.64-70, 79-88, 93) | 5-5476 | |
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| 4625(p.21-40, 56, 58-9, 64-5, 91-8, 164-70, 177-86, 192) | 6-506 | |
| 4625(p.55, 72-84, 99-124, 142-51, 187-91, 193-4, 209-21) | 6-526 | |
| 4625(p.66-71) | 6-625 | |
| 4625(p.85-90) | 6-501 | |
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| 4710 | 6-164 | |
| 4711 | 6-125 | |
| 4713 | 6-2555 | |
| 4713(p.9-47) | 6-2562 | |
| 4713(p.48-73) | 6-2563 | |
| 4713(p.74-86) | 6-2564 | |
| 4713(p.87-100) | 6-2565 | |
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| 4745(p.73-93) | 6-4692 | |
| 4745(p.94-126) | 6-4693 | |
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| 4808 | 6-4037 | |
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| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| ANL | | |
| 4813 | 6-4572 | |
| 4816 | 6-4132 | |
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| ANL-AFS | | |
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| 203 | ADD 2, p.32 | |
| 241 | 1-50 | |
| 245 | 2-1087 | |
| 248 | 1-704 | |
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| 34 | 5-588 | |
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| ANL-FST | | |
| 380 | 2-1301 | |
| ANL-FWHZ | | |
| 152 | 1-585 | |
| 155 | 1-587 | |
| 156 | 1-584 | |
| 157 | 1-446 | |
| 161 | 1-723 | |
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| 164 | 1-447 | |
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| 185 | 5-3084 | |
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| 203 | 6-4036 | |
| ANL-HDY | | |
| 212 | 1-1073 | |
| 253 | 1-756 | |
| 362 | 1-1963 | |
| 412 | ADD 2, p.242 | |
| 426 | 6-1829 | |
| 450 | 1-697 | |
| 463 | 1-90 | |
| 466 | 1-613 | |
| 492 | 1-146 | |
| 493 | 1-152 | |
| 494 | 1-122 | |
| 496 | 1-16 | |
| 499 | 1-588 | |
| 504 | 1-1251 | |
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| 535 | 1-1186 | |
| 540 | 4-136 | |
| 545 | 1-1312 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| ANL-HDY | | |
| 546 | 1-1292 | |
| 547 | 5-3046 | |
| 548 | 5-3047 | |
| 549 | 5-3069 | |
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| 561(rev.) | 5-6146 | |
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| 575 | 5-3057 | |
| 576 | 5-3356 | |
| 577 | 5-3053 | |
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| 580 | 5-3062 | |
| 581 | 5-3067 | |
| 582 | 5-3055 | |
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| 586 | 5-3048 | |
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| 596 | 1-1859 | |
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| 602 | 2-1436 | |
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| 615 | 2-1741 | |
| 619 | 2-1533 | |
| 637 | 5-5166 | |
| 674 | 5-1973 | |
| 678 | 5-647 | |
| 696 | 6-224 | |
| 697(rev.) | 6-1906 | |
| 701 | 6-2644 | |
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| ANL-HE | | |
| 93 | 3-1672 | |
| ANL-JJK-14A | | |
| 160 | 1-1959 | |
| 161 | 1-1960 | |
| ANL-JJK-14B | | |
| 1 | 1-1064 | |
| 9 | 1-1067 | |
| 24 | 1-1220 | |
| 48 | 1-1222 | |
| 53 | 2-1471 | |
| 56 | 2-1474 | |
| 63 | 1-1229 | |
| 64 | 2-2060 | |
| 65 | 2-1481 | |
| 66 | 2-1470 | |
| 72 | 2-1473 | |
| 78 | 2-1306 | |
| 82 | 1-1219 | |
| 132 | 2-1489 | |
| 134 | 1-1 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| **ANL-JJK-14B** | | |
| 136 | 2-1477 | |
| 143 | 2-1478 | |
| 144 | 2-1479 | |
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| 149 | 1-1218 | |
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| 157 | 2-1476 | |
| 167 | 2-1447 | |
| 168 | 2-1332 | |
| 171 | 2-1475 | |
| 172 | 2-1614 | |
| **ANL-MGI** | | |
| 33 | 5-5279 | |
| 34 | 5-5212 | |
| **ANL-NS** | | |
| 28 | 2-647 | |
| 139 | 2-2020 | |
| 212 | 2-1923 | |
| 243 | 2-1893 | |
| **ANL-OCS** | | |
| 275 | 6-4981 | |
| **ANL-SL** | | |
| 548 | 6-3513 | |
| **ANL-WHZ** | | |
| 311 | 6-4938 | |
| **ANL-WMM** | | |
| 341 | 1-586 | |
| 633 | 5-812 | |
| 647 | 5-5952 | |
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| 962 | 6-3811 | |
| 975 | 6-4632 | |
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| 995 | 6-5978 | |
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| 59 | 5-4274 | $0.15 |
| 63 | 5-3673 | 0.10 |
| 72 | 6-272 | 0.10 |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| **ARE-MR (Non-AEC)** | | |
| 1/49 | 3-1677 | |
| **ARL-HE (Non AEC)** | | |
| 102 | 5-1003 | |
| **ARL-RI/R (Non-AEC)** | | |
| 251 | 5-2510 | |
| **ARSC** | | |
| 27 | 3-1652 | |
| 30 | 3-1651 | |
| 31 | 4-3603 | |
| **ASTM-TP (Non-AEC)** | | |
| 262 | 2-852 | |
| **ATI (Non-AEC)** | | |
| 43532 | 6-274 | |
| 86249 | 5-2457 | |
| 96562 | 5-5392 | |
| 105970 | 6-4786 | |
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| 119351 | 6-2322 | |
| 122991 | 6-4043 | |
| 133893 | 6-5746 | |
| 135688 | 6-4785 | |
| 145915 | 6-6350 | |
| 154974 | 6-5359 | |
| **BC** | | |
| 14 | 6-2593 | |
| 26 | 1-210 | |
| 33 | ADD 2, p.70 | |
| 41 | ADD 1, p.497 | |
| 69 | 2-1995 | |
| 70(rev.) | 1-1264 | |
| 73 | 1-206 | |
| 74 | 1-878 | |
| **BDDA (British)** | | |
| 191 | 5-815 | |
| 194 | 5-1632 | |
| 212 | 5-1543 | |
| 217 | 5-1544 | |
| 221 | 5-1835 | |
| **BI (British)** | | |
| 37 | 4-143 | |
| 55 | 3-326 | |
| 84A | 5-3927 | |
| **BIOS-FR (Non-AEC)** | | |
| 319 | 3-1112 | |
| **BMI** | | |
| 63 | 5-5168 | |
| 74 | 5-5191 | $0.10 |
| 77 | 5-5192 | 0.10 |
| 78 | 6-884 | |
| 703 | 6-227 | 0.15 |
| 705 | 6-273 | 0.15 |
| 707 | 6-2670 | |
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| 709(rev.) | 6-898 | |
| 713 | 6-915 | 0.10 |
| 716 | 6-2082 | |
| 727 | 6-2378 | |
| 742 | 6-3780 | 0.25 |
| 747 | 6-4479 | 0.35 |
| 748 | 6-4774 | 0.35 |
| 758 | 6-5377 | |
| **BM-IC (Non-AEC)** | | |
| 7627 | 6-3737 | |
| **BMI-JDS** | | |
| 129 | 5-548 | |
| 202 | 5-2180 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| BMI-MWM | | |
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| BMI-RI | | |
| 4741 | 5-361 | |
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| 42 | 5-392 | |
| 44 | 5-5181 | |
| 45 | 5-3278 | |
| BM-RI (Non-AEC) | | |
| 4218 | 6-862 | |
| 4756 | 6-126 | |
| 4766 | 5-2833 | |
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| 26 | 4-2426 | o.p. |
| 28 | 4-1391 | $0.10 |
| 29 | 4-1392 | 0.10 |
| 30 | 4-1408 | 0.10 |
| 31 | 4-1486 | 0.10 |
| 44 | 4-4843 | 0.50 |
| 44(p.1-9) | 4-4844 | |
| 44(p.10-15) | 4-4845 | |
| 44(p.16-38) | 4-4846 | |
| 44(p.39-48) | 4-4847 | |
| 44(p.49-58) | 4-4848 | |
| 44(p.59-66) | 4-4849 | |
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| 51 | 4-4302 | |
| 58 | 4-5832 | $0.20 |
| 61 | 4-6342 | o.p |
| 64 | 4-5318 | |
| 68 | 4-6341 | $0.10 |
| 70 | 5-2666 | o.p. |
| 70(p.1-15) | 5-2667 | |
| 70(p.16-36) | 5-2668 | |
| 70(p.37-55) | 5-2669 | |
| 70(p.56-63) | 5-2670 | |
| 70(p.64-76) | 5-2671 | |
| 70(p.77-96) | 5-2672 | |
| 70(p.97-110) | 5-2673 | |
| 70(p.111-18) | 5-2674 | |
| 70(p.119-38) | 5-2675 | |
| 70(p.139-45) | 5-2676 | |
| 74 | 5-416 | |
| 81 | 5-3835 | $0.20 |
| 82 | 5-2400 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| BNL | | |
| 82(p.1-25) | 5-2484 | |
| 82(p.26-32) | 5-2502 | |
| 82(p.33-40) | 5-2588 | |
| 82(p.41-104) | 5-2401 | |
| 82(p.54-8) | 5-2402 | |
| 82(p.73-81) | 5-2403 | |
| 82(p.82-91) | 5-2404 | |
| 82(p.96-100) | 5-2612 | |
| 82(p.105-10) | 5-2485 | |
| 82(p.111-20) | 5-2312 | |
| 82(p.121-2) | 5-2313 | |
| 84 | 5-1867 | o.p. |
| 85 | 5-2566 | o.p. |
| 89 | 5-2682 | o.p. |
| 90 | 5-2345 | o.p. |
| 92 | 5-2654 | |
| 93 | 5-4143 | |
| 93(p.1-32) | 5-4226 | |
| 93(p.33-41) | 5-4169 | |
| 93(p.42-8) | 5-4259 | |
| 93(p.49-107) | 5-4084 | |
| 93(p.108-14) | 5-4144 | |
| 93(p.115-24) | 5-4054 | |
| 97 | 5-4647 | $0.25 |
| 103 | 5-5228 | 0.35 |
| 103(p.3-46) | 5-5229 | |
| 103(p.47-52) | 5-4983 | |
| 103(p.59-61) | 5-5103 | |
| 103(p.62-78) | 5-5051 | |
| 103(p.86-93) | 5-4966 | |
| 112 | 5-4328 | o.p. |
| 117 | 5-6243 | |
| 117(p.1-16, 69-81) | 5-6244 | |
| 117(p.17-25, 61-2) | 5-6304 | |
| 117(p.26-30) | 5-6451 | |
| 117(p.31-43, 49-61, 63-8) | 5-6113 | |
| 117(p.44-9, 94-121) | 5-6044 | |
| 117(p.82-93) | 5-6426 | |
| 119 | 5-6870 | $0.10 |
| 121 | 5-6720 | |
| 131 | 6-492 | |
| 132 | 6-1746 | |
| 132(p.1-64) | 6-1747 | |
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| 141 | 6-1552 | 0.10 |
| 149 | 6-2800 | |
| 153 | 6-1816 | 0.25 |
| 167 | 6-5640 | |
| 171 | 6-4801 | 0.45 |
| 173 | 6-5872 | 0.35 |
| 177 | 6-4802 | |
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| **BNL-I** | | |
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| 5 | 2-228 | |
| 6 | 1-1602 | |
| **BNL-L** | | |
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| **BNL-S** | | |
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| **BNL-T** | | |
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| **CAR** | | |
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| **CB** | | |
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|---|---|---|
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|---|---|---|
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| **CNL** | | |
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| 33 | 1-652 | |
| 44 | 2-248 | |
| **COO** | | |
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| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| **COO** | | |
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| 90 | 6-2356 | |
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| **CP** | | |
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| 413 | 6-353 | |
| 992 | 5-4856 | |
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| 1698 | 5-3415 | |
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| 2072 | 5-93 | |
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| 3316 | 2-182 | |
| 3432 | 6-4219 | |
| 3702 | 1-1698 | |
| 3800(sects. 3 and 4) | 6-698 | |
| **CR** | | |
| 2106 | 5-404 | |
| **CRC (Canadian)** | | |
| 390 | 2-677 | |
| 407 | 3-353 | |
| 408 | 2-2032 | |
| 440 | 4-5442 | |
| 451 | 5-6080 | |
| 468 | 5-3999 | |
| 470 | 6-1857 | |
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| 449 | 5-1803 | |
| **CREL (Canadian)** | | |
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| 453 | 5-445 | |
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| 467 | 5-3461 | |
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| **CRHR (Canadian)** | | |
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| REPORT | ABSTRACT | AVAILABILITY |
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| 411 | 3-454 | |
| 455 | 5-50 | |
| **CRLIR (Non-AEC)** | | |
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| 64 | 6-1611 | |
| 115 | 6-4659 | |
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| **CRNE (Canadian)** | | |
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| 65(sect. 3) | 5-3973 | |
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| 65(sect. 5) | 5-3977 | |
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| 84 | 5-4275 | NSA |
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| 52-1-19 | 6-4493 | |
| 52-2-24 | 6-4044 | |
| **DIC (Non-AEC)** | | |
| 6802 | 6-1470 | |
| 6832 | 6-1467 | |
| **DL (Canadian)** | | |
| 2 | 3-837 | |
| 3 | 3-1292 | |
| 4 | 4-1016 | |
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| 65 | 6-814 | $0.15 |
| **DR (Canadian)** | | |
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| 1069 | 1-1699 | |
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| 1404 | 5-6804 | |
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| 1566 | 5-2809 | |
| 1567 | 5-3879 | |
| 1567(rev.) | 5-5556 | |
| 1570 | 5-5920 | |
| 1578 | 5-3962 | |
| 1578(sect. 1) | 5-4009 | |
| 1578(sect. 2) | 5-4029 | |
| 1578(sect. 3) | 5-3973 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| **DR (Canadian)** | | |
| 1578(sect. 4) | 5-4037 | |
| 1578(sect. 5) | 5-3977 | |
| 1588 | 5-5437 | |
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| 1623 | 5-4515 | |
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| 1661 | 5-5696 | |
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| 130 | 4-5413 | |
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| 2A101734 | 6-203 | |
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| 4A(12) 966870 | 6-4059 | |
| **EES-C (Non-AEC)** | | |
| 3229C | 6-182 | |
| 3395B | 5-2695 | |
| **ERA (Canadian)** | | |
| 166 | 3-1125 | |
| 189 | 5-5392 | |
| **ERDE (Non-AEC)** | | |
| 4/EMR/51 | 6-1991 | |
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| 401-14 | 6-3229 | |
| **$F^1$ (Non-AEC)** | | |
| 3755-50 | 6-859 | |
| 4358-50 | 6-904 | |
| **FA-R (Non-AEC)** | | |
| 1016 | 6-3739 | |
| **F-TR (Non-AEC)** | | |
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| **FZA (Non-AEC)** | | |
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| **G (Non-AEC)** | | |
| 119 | 6-5597 | |
| **GE-HH** | | |
| 7 | 2-2180 | |
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| 53 | 6-4477 | |
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| 4 | 2-513 | |
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| 19 | 4-3058 | |
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| 21 | 4-3060 | |
| 22 | 4-4891 | |
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| 1 | 4-2672 | |
| 5 | 4-1972 | |
| 6 | 4-3061 | |
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| REPORT | ABSTRACT | AVAILABILITY |
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| 397 | 5-1446 | |
| 402 | 5-505 | |
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| 17 | 4-5876 | |
| HPC (British) | | |
| 35 | 5-3928 | |
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| 4 | 3-1729 | |
| 5 | 4-5786 | |
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| 18151 | 4-5639 | |
| 18178 | 4-5640 | |
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| 18321 | 4-5855 | |
| 18823 | 5-536 | |
| 19474 | 5-5363 | $0.35 |
| 20092 | 5-4329 | |
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| 20283 | 5-3013 | |
| 20484 | 6-6452 | |
| 20668 | 6-513 | |
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| 20847(pt. 1) | 5-4984 | 0.40 |
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| 20999 | 5-6082 | 0.10 |
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| 22468 | 6-196 | 0.10 |
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| IM (Canadian) | | |
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| 29 | 1-1782 | |
| 31 | 5-399 | |
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| 46 | 3-1032 | |
| 50 | 5-388 | |
| 52 | 4-5722 | |
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| 108 | 5-352 | 0.05 |
| 109 | 5-2701 | 0.10 |
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| 142 | 6-562 | 0.40 |
| 143 | 5-5601 | 0.35 |
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| 255 | 6-6007 | |
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| 4 | 4-3499 | |
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| 6 | 6-883 | |
| JPL (Non-AEC) | | |
| 4-120 | 5-3929 | |
| JPL-Memo (Non-AEC) | | |
| 3-4 | 6-1065 | |
| JPL-PR (Non-AEC) | | |
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| 4-97 | 6-1234 | |
| K | | |
| 2.31.1 | 2-1220 | |
| 2.31.2 | 2-1217 | |
| 2.31.4 | 2-1219 | |
| 2.31.7 | 2-1218 | |
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| 295(pt. 2) | 5-7056 | |
| 302 | 2-55; 2-419 | |
| 317 | 2-679 | |
| 323 | 2-514 | |
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| REPORT | ABSTRACT | AVAILABILITY |
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| REPORT | ABSTRACT | AVAILABILITY |
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| REPORT | ABSTRACT | AVAILABILITY |
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| REPORT | ABSTRACT | AVAILABILITY |
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| REPORT | ABSTRACT | AVAILABILITY |
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| 44 & 45 | 1-1629 | |
| 50 & 51 | 1-1919 | |
| 54 & 55 | 1-1527 | |
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| MIT-RLE | | |
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| 5 | 4-1974 | |
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| REPORT | ABSTRACT | AVAILABILITY |
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| MPC (Canadian) | | |
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| MPR | | |
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| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
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| NACA (Non-AEC) | | |
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| 2248 | 5-3409 | |
| 2257 | 5-2459 | |
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| 2319 | 5-4140 | |
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| 2326 | 5-3678 | |
| 2378 | 6-860 | |
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| 2576 | 6-899 | |
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| 2745 | 6-5381 | |
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| 2750 | 6-5360 | |
| NAVDOCKS-P (Non-AEC) | | |
| 51 | 6-2907 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| **NAVEXOS-P (Non-AEC)** | | |
| 733(rev.) | 6-6604 | |
| **NAVMED-P (Non-AEC)** | | |
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| 1572 | 5-3676 | |
| 1837 | 6-1714 | |
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| 10854 | 5-1336 | |
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| 1003 | 6-5685 | |
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| **NBS-D** | | |
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| 112 | 6-5105 | |
| 113 | 6-5104 | |
| **NBS-P** | | |
| 28(excerpt) | 5-2197 | |
| **NCSC** | | |
| 46 | 6-3403 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| **NDRC (Non-AEC)** | | |
| 4-580 | 2-932 | |
| **NDRC-D (Non-AEC)** | | |
| 1-110 | 1-1669 | |
| **NE (Non-AEC)** | | |
| 091105 | 6-1800 | |
| **NEPA (Non-AEC)** | | |
| 258 | 1-1790 | |
| 322 | 5-398 | |
| 465 | 2-1184 | |
| 502 | 3-1332 | |
| 513 | 2-1183 | |
| 546 | 4-72 | |
| 547 | 3-2119 | |
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| 1377 | 6-3556 | |
| 1383 | 5-108 | |
| 1391 | 5-109 | |
| 1399 | 4-6604 | |
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| 1435 | 5-110 | |
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| 1451 | 5-2506 | |
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| 1860 | 5-5206 | |
| 1864 | 6-1316 | |
| **NP (AEC File No. for Non-AEC Repts.)** | | |
| 27 | 1-1603 | |
| 107 | 1-1660 | |
| 137 | 1-1903 | |
| 140 | 1-1662 | |
| 141 | 2-2047 | |
| 142 | 2-1916 | |
| 143 | 1-1771 | |
| 145 | 1-1943 | |
| 154 | 1-1749 | |
| 156 | 1-1527 | |
| 159 | 1-1519 | |
| 160 | 1-1861 | |
| 162 | 1-1606 | |
| 163 | 1-1629 | |
| 164 | 1-1864 | |
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| 237 | 1-1924 | |
| 248 | 1-1669 | Void; see NDRC-D1-110 |
| 253 | 1-1621 | |
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| 343 | 1-1535 | |
| 346 | 1-1624 | |
| 347 | 1-1625 | |
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| 428 | 1-1644 | |
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| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| **NP (AEC File No. for Non-AEC Repts.)** | | |
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| 454 | 1-1863 | |
| 455 | 2-328 | |
| 456 | 2-68 | |
| 458 | 2-237 | |
| 459 | 2-80 | |
| 460 | 2-81 | |
| 462 | 2-83 | |
| 474-495 | 2-334 | |
| 500 | 2-555 | |
| 504 | 2-575 | |
| 506 | 2-472 | |
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| 510 | 2-652 | |
| 512 | 2-403 | |
| 513 | 2-556 | |
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| 672 | 2-1567 | |
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| 710 | 3-356 | |
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| 851 | 3-400 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| NP (AEC File No. for Non-AEC Repts.) | | |
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| 853 | 3-404 | |
| 854 | 3-422 | |
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| 859 | 3-347 | |
| 860 | 3-348 | |
| 861 | 3-1901 | |
| 866 | 3-756 | |
| 870 | 3-698 | |
| 871 | 3-703 | |
| 875 | 3-971 | |
| 878 | 3-1008 | |
| 881 | 3-811 | |
| 882 | 3-1561 | |
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| 1089 | 4-1784 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
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| 1125 | 4-220 | |
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| 1472 | 4-5684 | |
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| 1483 | 5-176 | |
| 1484 | 4-5863 | |
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| 1498 | 4-4657 | |
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| 1507 | 4-5962 | |
| 1509 | 4-6195 | |
| 1528 | 4-5230 | |
| 1529 | 4-5225 | |
| 1533 | 4-6613 | |
| 1534 | 5-471 | |
| 1537 | 4-5313 | |
| 1556 | 4-4986 | |
| 1563 | 5-417 | |
| 1564 | 5-171 | |
| 1566 | 4-6652 | |
| 1567 | 6-638 | |
| 1575 | 5-373 | |
| 1580 | 4-5278 | |
| 1582 | 4-5043 | |
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| 1626 | 5-2262 | |
| 1627 | 4-6609 | |
| 1628 | 4-5910 | |
| 1630 | 5-164 | |
| 1631 | 5-258 | |
| 1632 | 5-163 | |
| 1634 | 4-5877 | |
| 1636 | 5-125 | |
| 1639 | 5-162 | |
| 1642 | 5-245 | |
| 1646 | 4-5617 | |
| 1649 | 4-6373 | |
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| 1738 | 5-206 | |
| 1748 | 5-101 | |
| 1749 | 5-102 | |
| 1752 | 5-114 | |
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| 1769 | 5-898 | |
| 1770 | 5-978 | |
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| 1777 | 5-1576 | |
| 1777(p.3-10) | 5-1506 | |
| 1777(p.11-22) | 5-1583 | |
| 1777(p.23-40) | 5-1667 | |
| 1777(p.41-50) | 5-1668 | |
| 1777(p.51-84) | 5-1501 | |
| 1777(p.85-90) | 5-1539 | |
| 1777(p.91-130) | 5-1647 | |
| 1777(p.131-86) | 5-1664 | |
| 1777(p.187-98) | 5-1669 | |
| 1777(p.199-202) | 5-1701 | |
| 1779 | 5-3933 | |
| 1780 | 5-420 | |
| 1781 | 5-709 | |
| 1782 | 5-679 | |
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| 1813(paper 4) | 5-1132 | |
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| 1813(paper 7) | 5-1068 | |
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| 1813(paper 11) | 5-1072 | |
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| 1857(sect.4) | 5-4178 | |
| 1857(sect.5) | 5-4093 | |
| 1857(sect.6) | 5-4124 | |
| 1857(sect.7) | 5-4252 | |
| 1857(sect.8) | 5-4231 | |
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| 1947(p.6-8) | 5-3680 | |
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| 3424 | 5-7163 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
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| 3437(p.1-5) | 5-7010 | |
| 3437(p.6-17) | 5-7223 | |
| 3437(p.19-29) | 5-7005 | |
| 3437(p.30-3) | 5-7047 | |
| 3437(p.34-42) | 5-7254 | |
| 3437(p.43-57) | 5-7253 | |
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| 3446 | 5-7035 | |
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| 3456(rept. 36) | 6-117 | |
| 3456(rept. 37) | 6-118 | |
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| 3561(p.1-17) | 6-1393 | |
| 3561(p.18-38) | 6-1424 | |
| 3561(p.39-70) | 6-1533 | |
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| 3563 | 6-1687 | |
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| 3590 | 6-1701 | |
| 3591 | 6-1833 | |
| 3591(sect. 1) | 6-1818 | |
| 3591(sect. 1A) | 6-1883 | |
| 3591(sect. 1B) | 6-1859 | |
| 3591(sect. 2) | 6-1819 | |
| 3591(sect. 2A) | 6-1793 | |
| 3591(sect. 2B) | 6-1887 | |
| 3591(sect. 2C) | 6-1931 | |
| 3591(sect. 3) | 6-1754 | |
| 3591(sect. 4) | 6-1839 | |
| 3591(sect. 4A) | 6-1909 | |
| 3591(sect. 4B) | 6-1860 | |
| 3591(sect. 5) | 6-1861 | |
| 3592 | 6-1695 | |
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| 3592(sect. 5) | 6-1929 | |
| 3593 | 6-1722 | |
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| 865(p.78-84) | 5-2711 | |
| 865(p.84-6) | 5-2924 | |
| 865(p.87-95) | 5-2944 | |
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| 940(sect. 3) | 5-4592 | |
| 940(sect. 4) | 5-4593 | |
| 940(sect. 5) | 5-4594 | |
| 940(sect. 6) | 5-4542 | |
| 940(sect. 7) | 5-4526 | |
| 940(sect. 8) | 5-4516 | |
| 940(sect. 9) | 5-4630 | |
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| 975 | 5-3777 | 0.10 |
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| 1040 | 5-5266 | 0.10 |
| 1044 | 6-192 | |

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| 1092(sect. 1) | 6-1548 | |
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| 1092(sect. 3) | 6-1549 | |
| 1092(sect. 4) | 6-1535 | |
| 1092(sect. 5) | 6-1499 | |
| 1092(sect. 8) | 6-1511 | |
| 1092(sect. 9) | 6-1561 | |
| 1097 | 5-5831 | |
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| 1159 | 6-3335 | |
| 1160 | 6-3336 | |
| 1163 | 6-2759 | |
| 1164 | 6-3584 | |
| 1164(sects. 1 and 2) | 6-3712 | |
| 1164(sects. 3, 4, and 5) | 6-3688 | |
| 1164(sects. 6 and 7) | 6-3674 | |
| 1164(sects. 8, 9, and 13) | 6-3666 | |
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| 1278(p.2-12) | 6-5474 | |
| 1278(p.12-38) | 6-5399 | |
| 1279 | 6-5309 | |
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| 1289 | 6-6624 | |
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| 1353 | 6-6512 | |
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| 36 | 5-5949 | |
| 37 | 5-5201 | |
| 38 | 5-5202 | |
| 39 | 5-5060 | |
| 40 | 5-5086 | |
| 41 | 5-5028 | |
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| **ORO** | | |
| 76 | 6-6067 | |
| 77 | 6-5940 | |
| 78 | 6-6301 | |
| 79 | 6-6595 | |
| **OSRD (Non-AEC)** | | |
| 1668 | 2-1575 | |
| 5499 | 2-1577 | |
| **P (Misc.)** | | |
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| 132 | 4-4949 | |
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| 1744 | 2-1744 | |
| **PA (Non-AEC)** | | |
| 10 | 5-5748 | |
| 13 | 5-5241 | |
| 14 | 5-6274 | |
| **PB (Non-AEC)** | | |
| 93615 | 4-3898 | |
| **PBL** | | |
| 92185 | 1-457 | |
| **PC (Canadian)** | | |
| 1235 | 5-1000 | |
| 1240 | 5-591 | |
| **PD (Canadian)** | | |
| 197 | 2-2119 | |
| 223 | 6-1831 | |
| 224 | 6-1854 | |
| **PORTON (Non-AEC)** | | |
| 552 | 6-756 | |
| 2474 | 6-938 | |
| **PORTON-Memo (Non-AEC)** | | |
| 6 | 6-757 | |
| **PR (Canadian)** | | |
| 129 | 6-6517 | |
| **PR-P (Canadian)** | | |
| 6E | 4-4034 | |
| 11E | 5-6305 | |
| 12E | 6-1802 | |
| 13E | 6-2977 | |
| 14E | 6-5417 | |
| **PSC** | | |
| 2 | 5-964 | |
| **PTN (Non-AEC)** | | |
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| **R (Misc.)** | | |
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| 52GL50 | 6-2646 | |
| 52GL52 | 6-2645 | |
| 104 | 2-1379 | |
| 123 | 3-340 | |
| 131 | 2-1958 | |
| 135 | 3-1455 | |
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| 1585-50 | 6-904 | |
| 5826 | 6-1097 | |
| 5997 | 6-1964 | |
| 6089 | 6-2256 | |
| 6279 | 6-5538 | |
| 6317 | 6-5549 | |
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| 94602-10A | 1-1404 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| **RAD (Non-AEC)** | | |
| 196 | 1-1865 | |
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| 206 | 6-1709 | |
| 207 | 6-1589 | |
| **RAE-R-MET (Non-AEC)** | | |
| 64 | 5-5668 | |
| 65 | 5-7106 | |
| **RAE-TN-MET (Non-AEC)** | | |
| 130 | 5-5665 | |
| 137 | 5-5063 | |
| 141 | 5-5667 | |
| 155 | 6-5387 | |
| **R & D (Non-AEC)** | | |
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| **RCC-R (Non-AEC)** | | |
| 7 | 5-5277 | |
| **RD** | | |
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| **RDB** | | |
| 333/1 | 6-237 | |
| **RDS (Non-AEC)** | | |
| 1B | 5-1474 | |
| 3A | 5-1336 | |
| **R/GC (Non-AEC)** | | |
| 896/38 | 5-1544 | |
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| 986/39 | 5-1835 | |
| 1304 | 5-828 | |
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| **RIB** | | |
| 2 | 4-1756 | |
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| 4.6.261 | 6-3629 | |
| 4.6.285 | 1-398 | |
| 7.6.7 | 5-5256 | |
| 26 | 2-1937 | |
| 27.6.24 | 1-309 | |
| 29 | 2-1929 | |
| 89 | 2-1949 | |
| 90 | 2-1946 | |
| 108 | 2-2134 | |
| 109 | 2-1947 | |
| 113 | 2-1999 | |
| 143 | 2-1948 | |
| 157 | 3-1364 | |
| 162 | 2-1939 | |
| 163 | 2-1951 | |
| 166 | 2-1953 | |
| 167 | 2-1936 | |
| 174 | 2-1940 | |
| 177 | 2-1943 | |
| 179 | 2-2135 | |
| 184 | 2-1950 | |
| 189 | 2-1945 | |
| 190 | 2-1935 | |
| 248 | 3-2278 | |
| 374 | 4-5316 | |
| 419 | 5-364 | |
| 420 | 5-365 | |
| 421 | 5-366 | |
| 422 | 5-367 | |
| 433 | 5-1017 | |
| 440 | 5-1018 | |
| 442 | 5-368 | |
| 448 | 5-1556 | |
| 460 | 5-2792 | |
| 481 | 5-7062 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| **RL (Misc.)** | | |
| 487 | 5-2466 | |
| 488 | 5-3522 | |
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| 578 | 5-5661 | |
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| 831 | 2-1952 | |
| 832 | 2-1933 | |
| 837 | 2-2133 | |
| 853 | 2-1931 | |
| 867 | 2-1927 | |
| 883 | 2-1942 | |
| 885 | 2-1944 | |
| 892 | 2-1934 | |
| 893 | 2-1930 | |
| 906 | 2-1928 | |
| **RM (Non-AEC)** | | |
| 248 | 5-252 | |
| 653 | 5-5917 | |
| 653(pt.2) | 6-5662 | |
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| 547 | 5-4765 | |
| 547(rev.) | 6-212 | |
| 563 | 5-833 | $0.60 |
| 612 • | 5-4430 | |
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| 660 | 5-6780 | |
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| 1 | 3-1874 | |
| 3 | 4-1957 | |
| **RPR (Non-AEC)** | | |
| 119 | 6-939 | |
| 120 | 6-940 | |
| **S and T Memo (Non-AEC)** | | |
| 14/51 | 6-2668 | |
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| 1566Tr | 5-3458 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| **SCR (Non-AEC)** | | |
| 58 | 5-5656 | |
| **SEP** | | |
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| 17 | 5-1012 | |
| 23 | 4-361 | |
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| 38 | 5-3149 | |
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| 564 | 5-1257 | |
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| 2501 | 4-5656 | |
| 2502 | 5-3690 | |
| 2503 | 5-6752 | |
| 2504 | 6-1475 | |
| 2505 | 6-3791 | |
| 2506 | 6-5610 | |
| 3500 | 6-2340 | |
| **SR** | | |
| 373 | 5-1259 | |
| 393 | 5-1258 | |
| **STR (Non-AEC)** | | |
| 562 | 6-859 | |
| **TAB** | | |
| 78 | 6-2065 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
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| 591 | 6-4279 | |
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| 132(pt.1) | 5-5682 | |
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| 135 | 5-3907 | |
| 142 | 5-5683 | |
| 144 | 6-1453 | |
| 148A | 5-5219 | |
| 151 | 6-1454 | |
| 152 | 5-5187 | |
| 153A | 6-1136 | |
| 170 | 6-5776 | |
| 182 | 6-1455 | |
| 236 | 6-4733 | |
| 237 | 6-5777 | |
| 243 | 6-5778 | |
| 244(pt.1) | 6-6355 | |
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| 269 | 6-6054 | |
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| 9B | 6-1456 | |
| 13A | 6-213 | |
| 24A | 6-214 | |
| 31 | 5-6773 | |
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| 97A | 5-6783 | |
| 102A | 5-7098 | |
| 146A | 6-1457 | |
| 147 | 6-589 | |
| 149 | 6-764 | |
| 183A | 5-5220 | |
| 251 | 6-1458 | |
| 252 | 5-4700 | |
| 306 | 6-1459 | |
| 316 | 6-6305 | |
| 335 | 6-2873 | |
| 360 | 6-6055 | |
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| 429 | 6-5779 | |
| 445 | 6-6056 | |
| 446 | 6-6599 | |
| TID | | |
| 82(suppl.1) | 6-3550 | |
| 235 | 5-1923 | $0.05 |
| 261 | 4-86 | |
| 265 | 4-2424 | |
| 292 | 4-786 | 0.10 |
| 295 | 4-2419 | 0.25 |
| 363 | 5-2114 | 0.30 |
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| 369(pt.E) | 6-3957 | |
| 371 | 5-903 | $0.20 |
| 372 | 5-1109 | |
| 375 | 4-6514 | 0.10 |
| 388 | 5-4986 | 0.50 |
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| 388(paper 2) | 5-5029 | |
| 388(paper 3) | 5-5348 | |
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| 388(paper 5) | 5-5440 | |
| 388(paper 6) | 5-4970 | |
| 388(paper 7) | 5-4988 | |
| 388(paper 8) | 5-4989 | |
| 388(paper 9) | 5-4990 | |
| 388(paper 10) | 4-4991 | |
| 388(paper 11) | 4-4992 | |
| 388(paper 12) | 5-4993 | |
| 388(paper 13) | 5-5094 | |

| REPORT | ABSTRACT | AVAILABILITY |
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| 388(paper 15) | 5-5284 | |
| 453 | 5-5387 | |
| 3006 | 5-4540 | |
| 3010 | 6-2089 | $0.90 |
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| 3011(1st rev.) | 6-6346 | 0.25 |
| 3013 | 5-6678 | 0.10 |
| 3022 | 6-2359 | 0.25 |
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| 5031(p.16-33) | 6-1317 | |
| 5031(p.34-57) | 6-1318 | |
| 5031(p.58-83) | 6-1188 | |
| 5031(p.84-151) | 6-1261 | |
| 5031(p.152-75) | 6-1319 | |
| 5031(p.176-209) | 6-1095 | |
| 5031(p.210-43) | 6-1320 | |
| 5031(p.244-71) | 6-1282 | |
| 5031(p.272-301 | 6-1189 | |
| 5031(p.302-10) | 6-1201 | |
| 5031(p.311-31) | 6-1321 | Nucleonics 9, No. 4, 60-8(1951) |
| 5031(p.332-52) | 6-1360 | |
| 5031(p.353-99) | 6-1212 | |
| 5031(p.400-9) | 6-1213 | |
| 5031(p.411-21) | 6-1322 | |
| 5031(p.422-49) | 6-1323 | |
| 5031(p.453-9) | 6-1190 | |
| 5031(p.459-63) | 6-1191 | |
| 5031(p.463-71) | 6-1192 | |
| 5031(p.471-5) | 6-1193 | |
| 5031(p.475-85) | 6-1194 | |
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| TIP-R | | |
| see R | | |
| TIP-U | | |
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| TN (Canadian) | | |
| 8 | 4-505 | |
| TPI (Canadian) | | |
| 18 | 6-1536 | |
| 19 | 6-1537 | |
| TR (Non-AEC) | | |
| 58/50 | 5-2540 | |
| 62/50 | 5-967 | |
| 75/51 | 5-2417 | |
| 93/51 | 6-1451 | |
| 95/52 | 6-3568 | |
| 96/52 | 6-3231 | |
| 97/52 | 6-4869 | |
| 98/52 | 6-5571 | |
| 99/52 | 6-6304 | |
| 100/52 | 6-5775 | |
| 101/52 | 6-6123 | |
| 102/52 | 6-5990 | |
| 281/52 | 6-88 | |
| 281-13 | 6-5567 | |
| 281-14 | 6-5568 | |
| 283-13 | 6-4396 | |
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| 283-19 | 6-6554 | |
| 328-16 | 6-4754 | |
| TT (Canadian) | | |
| 124 | 5-1532 | |
| 128 | 5-985 | |
| 149 | 5-3218 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| U (Non-AEC) | | |
| 547 | 1-30 | |
| 1289 | 5-4148 | |
| 1292 | 5-3965 | |
| 1383 | 1-1415 | |
| 1385 | 1-1442 | |
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| 8847 | ADD 2, p.242 | |
| 9356 | 6-4045 | |
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| 22488 | 6-4913 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| U (Non-AEC) | | |
| 22515 | 6-5322 | |
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| UAC | | |
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| 90 | 3-1795 | |
| 91 | 3-1820 | |
| 92 | 3-1821 | |
| 93 | 3-1835 | |
| 95 | 3-1949 | |
| 96 | 3-2019 | |
| 101 | 3-1822 | |
| 102 | 3-1823 | |
| 103 | 3-1877 | |
| 104 | 3-1989 | |
| 106 | 3-1824 | |
| 107 | 3-1904 | |
| 108 | 3-1842 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| UAC | | |
| 109 | 3-1950 | |
| 111 | 3-1825 | |
| 114 | 3-1817 | |
| 117 | 3-1899 | |
| 120 | 3-2020 | |
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| 122 | 3-1956 | |
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| 144 | 3-1935 | |
| 145 | 3-2013 | |
| 146 | 3-1943 | |
| 148 | 4-378 | |
| 149 | 4-379 | |
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| 152 | 4-355 | |
| 156 | 4-502 | |
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| 159 | 4-740 | |
| 160 | 4-821 | |
| 162 | 4-853 | |
| 163 | 4-496 | |
| 168 | 4-733 | |
| 169 | 4-362 | |
| 170 | 4-363 | |
| 172 | ADD 2, p.166 | |
| 173 | 4-1485 | |
| 174 | 4-1396 | |
| 175 | 4-500 | |
| 179 | 4-1515 | |
| 297 | 6-3257 | |
| 318 | 5-567 | |
| 320 | 5-467 | |
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| 377 | 5-3443 | |

| REPORT | ABSTRACT | AVAILABILITY |
|---|---|---|
| UAC | | |
| 379 | 5-5303 | |
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| 437 | 6-381 | |
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| UCL | | |
| 1 | 1-1766 | |

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| 1842 | 6-4966 | 0.55 |
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| 27 | 1-1094 | |
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| 33 | 1-698 | |
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|---|---|---|
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| 271 | 1-1805 | |
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| 4-49 | 6-449 | |
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| 10-15 | 6-1000 | |
| 10-18 | 5-3511 | |
| 10-20 | 6-695 | |
| 10-28 | 6-869 | |
| 10-40 | 6-952 | |
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| 10-74 | 6-3417 | |
| 15-3 | 6-870 | |
| 20-12 | 5-4234 | |
| 30-3 | 6-5091 | |
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| YUP | | |
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